

NEW DIRECTIONS

in
**HEALTH,
EDUCATION,
and
WELFARE**

Background Papers on Current and Emerging Issues

1963

Tenth Anniversary of the



U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Office of the Secretary



HV1607

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The Tenth Anniversary of the
UNITED STATES DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Anthony J. Celebrezze, Secretary
Wilbur J. Cohen, Assistant Secretary (for Legislation)
Office of Program Analysis

OFFICE OF ASSISTANT SECRETARY (FOR LEGISLATION)

Wilbur J. Cohen, Assistant Secretary

OFFICE OF PROGRAM ANALYSIS

Luther W. Stringham, Director

PROGRAM ANALYSIS OFFICERS

Joseph W. Kappel
Irvin E. Walker
Dr. Earl E. Huyck

PROGRAM COORDINATION OFFICER

Dr. Grace L. Hewell

STAFF ASSISTANTS

Eugenia Sullivan

Florence Campi

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FOREWORD

New Directions in Health, Education, and Welfare contains a series of selected papers on important public policy aspects of health, education, and welfare. It commemorates the Tenth Anniversary of the creation of the Department of Health, Education, and Welfare in 1953 and reviews some of the challenging problems of key concern today.

New Directions is the outgrowth of the analysis undertaken during the past two years of program developments and needs in the fields of health, education, and welfare which are the responsibility of the Office of Program Analysis under the supervision of the Assistant Secretary (for Legislation). It incorporates papers that have contributed to the development and better understanding of public programs, both by the executive and legislative branches. Each paper attempts to define the problem; marshals relevant background statistics and other facts; summarizes current efforts, public and private; and anticipates prospective needs or developments.

The nation as a whole is spending about \$101 billion this year in private and public monies on health, education, and welfare. Approximately one-third of this consists of private funds, and the other two-thirds, of public funds. The partnership between private and public agencies is characteristic of health, education, and welfare activities in the United States. Continuous review of important policy issues and the search for meaningful new directions in policy are of concern to Federal, State, and local governmental units; private agencies; and individuals.

A key feature of the ten-year period since the establishment of the Department is a change of emphasis from amelioration to prevention and rehabilitation. The newly-born Department of Health, Education, and Welfare took over functions which in large measure looked back to problems created by past emergencies or depressions and other types of crises, functions designed to help people adversely affected by these problems, whereas the Department of 1963, while making a major effort to improve its "ameliorative" programs, is stressing solutions to present and emerging problems.

The shift in emphasis from amelioration to prevention has developed, in large measure, by means of the major legislative changes in the fields of health, education, and welfare that have been enacted over the past ten years. This legislation has effected needed improvements and new directions in basic statutes governing the programs of the Department, and has also established important new programs of Federal assistance to the States and local communities to help solve pressing health, educational and social problems. As part of the new directions in policy, continued attention must be given to ways and means of emphasizing the preventive aspect in all programs.

As a first edition, this volume does not cover the full range of health, education, and welfare subjects that confront the official and challenge the citizen. It will be supplemented regularly by additional papers featured in the Department's monthly *Health, Education, and Welfare Indicators*.

In the development of this publication many agencies and individuals have made major contributions. In several fields they have provided the first such comprehensive overviews prepared for public use. The creativeness and persistence of two persons on my staff--Luther W. Stringham and Earl E. Huyck--have contributed greatly to the shaping and substance of this much-needed document.

A 20th century English philosopher, Alfred North Whitehead, said that most of the terrible sufferings that accompanied the Industrial Revolution were not caused by the steam engine or the power loom. Instead they were the consequences of a giant step in technical innovation with no corresponding step at all in social, political, or economic innovation. Today, in the age of automation, the same deficiencies are the root of our trouble. The objective is to make full use of our Nation's huge technical capacity and its wealth of potential human resources.

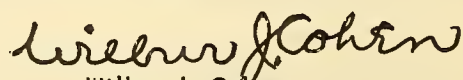
The miraculous progress our country has made promises the possibility of improved material abundance, good health, and more leisure time for all. An unfortunate byproduct of change, however, is man's difficulty in making the necessary changes in his social, economic, and political institutions in the face of such whirlwind development.

Change does not go step by step, pausing to allow us time to adjust to each step. Rather, it is an ever-steepening curve upward and presents not only the task of adjusting to today's world but, at the same time, of preparing for tomorrow's.

Our urban centers grow larger and larger. Where there was farmland yesterday, a community has blossomed--tied to a cultural core perhaps 10, 15, or even 20 miles away. And the core--the central city--is also undergoing change. Blight, delinquency, social ills, violence--these stand in dreary contrast to high-rise luxury apartments, efficient new office buildings, huge public housing projects, and the ever-widening freeways linking the center with its semiautonomous satellite communities.

Our people are mobile as no people before them--making the Nation their home. They are increasingly interdependent. And with automation, the market for muscle and sheer strength is waning--the demand for skill, technique, and knowledge booming.

The United States has come a long way in promoting the general welfare, but each generation must renew its wellsprings, think through individually, and discuss in groups, small and large, the validity of present policies on issues confronting the Nation, to reassess where we have been, to determine the directions we want to take, and how we may go to reach those objectives. Through *New Directions* we hope to evoke such thinking. Comments and suggestions for further use and development of this publication will be appreciated.



Wilbur J. Cohen
Assistant Secretary (for Legislation)
U. S. Department of Health,
Education, and Welfare

NEW DIRECTIONS in
Health, Education, and Welfare

June 1963

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See pages at the end of this document for a description of the relationship between *New Directions*. . .and the monthly *Health, Education, and Welfare Indicators* and its annual supplement, *Health, Education, and Welfare Trends*; the annual *Handbook on Programs*. . .and its supplement, the annual *Grants-in-Aid and other Financial Assistance Programs*. . . These together comprise the "5-Star Family of Publications" prepared by the Office of Program Analysis under the supervision of the Assistant Secretary (for Legislation), U. S. Department of Health, Education, and Welfare.

Pages 260-261 of this document contain sample pages of the central statistical core of the monthly *Indicators* and the annual *Trends*. Feature articles carried each month in *Indicators* were brought together to form *New Directions*.

PART I

NEW DIRECTIONS FOR NATION AND COMMUNITY



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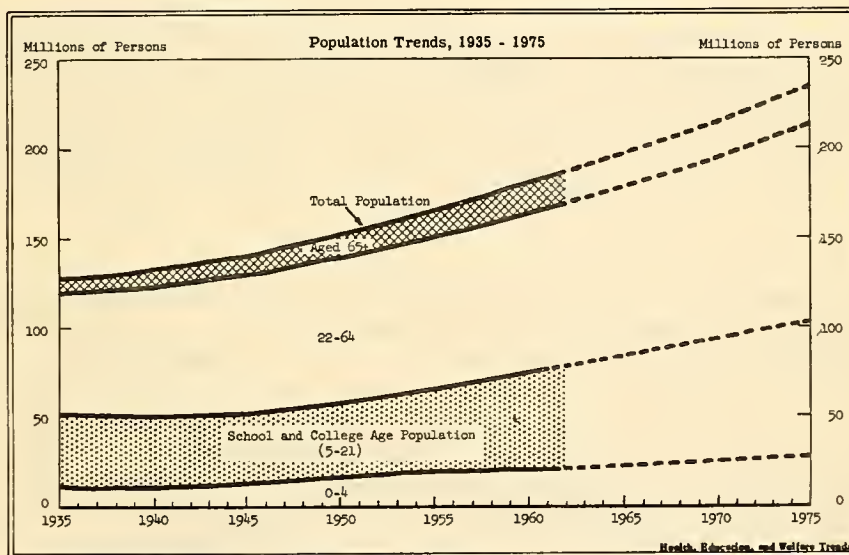
FIVE 1963 SPECIAL PRESIDENTIAL MESSAGES TO CONGRESS

- First Special Messages on Youth, the Elderly, Mental Illness and Mental Retardation
- New Approaches to Health and Education

Proposals for Federal action to further improve the Nation's health, education, and welfare were made by President John F. Kennedy in five 1963 special messages sent to Congress in January and February. New approaches were emphasized in the health and education messages. Mental illness and mental retardation, youth and the elderly were singled out for the first time in history as subjects of special presidential messages.

The President emphasized the stimulatory role of the Federal government in giving new directions to policies and programs and in strengthening the historic and unique partnership between the Federal government and the State and local governments, private agencies and institutions.

The special messages are summarized here in the order in which they were sent to Congress; the President's recommendations for legislative action are given particular attention. Charts developed by the Department of Health, Education, and Welfare are included to give a quick picture of the existing situation and needs as pointed out by the President in the text.



This summary was developed by the Office of the Assistant Secretary (for Legislation) in conjunction with the agencies of the Department of Health, Education, and Welfare. The five 1963 special messages are contained in Documents of the House of Representatives, 88th Congress, 1st Session as follows: (1) "Program for Education," January 29, No. 54; (2) "Mental Illness and Mental Retardation," February 5, No. 58; (3) "Health Program," February 7, No. 60; (4) "Our Nation's Youth," February 14, No. 66; and (5) "Elderly Citizens of Our Nation," February 21, No. 72.

PROGRAM FOR EDUCATION

President Kennedy outlined his 1963 program for Federal aid to education in a special message to the Congress on January 29.

The Educational Challenge

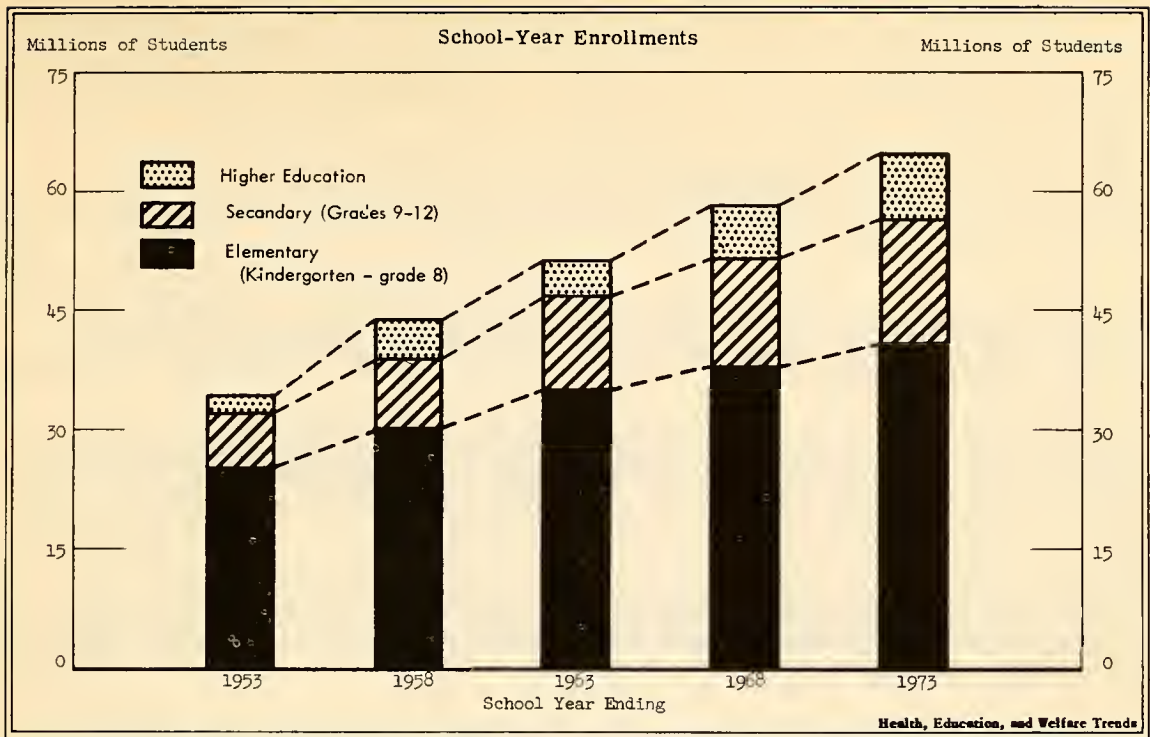
"A free nation can rise no higher than the standard of excellence set in its schools and colleges. Ignorance and illiteracy, unskilled workers and school dropouts--these and other failures of our educational system breed failures in our social and economic system: delinquency, unemployment, chronic dependence, a waste of human resources, a loss of productive power and purchasing power and an increase in tax-supported benefits.

Goals for the Nation

"First, we must improve the quality of instruction provided in all of our schools and colleges. We must stimulate interest in learning in order to reduce the alarming number of students who now drop out of school or who do not continue into higher levels of education. This requires more and better teachers--teachers who can be attracted to and retained in schools and colleges only if pay levels reflect more adequately the value of the services they render. It also requires that our teachers and instructors be equipped with the best possible teaching materials and curriculums.

"Second, our educational system faces a major problem of quantity--of coping with the needs of our expanding population and of the rising educational expectations for our children which all of us share as parents. Nearly 50 million people were enrolled in our schools and colleges in 1962--an increase of more than 50 percent since 1950. By 1970, college enrollment will nearly double, and secondary schools will increase enrollment by 50 percent.

"Third, we must give special attention to increasing the opportunities and incentives for all Americans to develop their talents to the utmost--to complete their education and to continue their self-development throughout life. This means preventing school dropouts, improving and expanding special educational services, and providing better education in slum, distressed, and rural areas where the educational attainment of students is far below par. It means increased opportunities for those students both willing and intellectually able to advance their education at the college and graduate levels. It means increased attention to vocational and technical education, which have long been underdeveloped in both effectiveness and scope, to the detriment of our workers and our technological progress.



The Federal Government's Responsibility

"Our concern as a Nation for the future of our children--and the growing demands of modern education which federal financing is better able to assist--make it necessary to expand Federal aid to education beyond the existing limited number of special programs.

"Yet...the Federal government cannot provide all the financial assistance needed to solve all of the problems mentioned. Instead of a general aid approach that could at best create a small wave in a huge ocean, our efforts should be selective and stimulative, encouraging the States to redouble their efforts."

The Comprehensive Approach

In presenting the entire educational program as one piece of legislation, the President cited three guidelines that had shaped the program: an appraisal of the entire range of educational problems, a selective application of Federal aid, and more effective implementation of existing laws. He said, "To enable the full range of educational needs to be considered as a whole, I am transmitting to the Congress with this message a single, comprehensive education bill--the National Education Improvement Act of 1963. For education cannot easily or wisely be divided into separate parts. Each part is linked to the other. The colleges depend on the work of the schools; the schools depend on the colleges for teachers; vocational and technical education is not separate from general education."

In broad categories the President's legislative recommendations would:

Expansion of Opportunities for Individuals in Higher Education

- Extend the National Defense Education Act student loan program, liberalize the repayment forgiveness for teachers, raise the ceiling on total appropriations and eliminate the limitation on amounts available to individual institutions.
- Authorize a supplementary new program of Federal insurance for commercial loans made by banks and other institutions to college students for educational purposes.
- Establish a new work-study program for needy college students unable to carry too heavy a loan burden, providing up to half the pay for students employed by the colleges in work of an educational character--as, for example, laboratory, library or research assistants.
- Increase the number of National Defense Education Act fellowships to be awarded by the Office of Education from 1,500 to 12,000, including summer session awards.
- Authorize a thorough survey and evaluation of the need for scholarships or additional financial assistance to undergraduate students so that any further action needed in this area can be considered by the next Congress.
- Expand the number of National Science Foundation fellowships and new teaching grants for graduate study from 2,800 in 1963 to 8,700 in fiscal 1964, through budget increases already before the Congress.

Expansion and Improvement of Higher Education

- Propose a program to provide loans to public and nonprofit private institutions of higher education for construction of urgently needed academic facilities.
- Authorize a program of grants to States for construction of public community junior colleges.
- Propose a program of grants to aid public and private nonprofit institutions in the training of scientific, engineering, and medical technicians in 2-year college-level programs, covering up to 50 percent of the cost of construction and equipping as well as operating the necessary academic facilities.
- Strengthen the National Science Foundation matching grant program for institutions of higher education to expand and improve graduate and undergraduate science facilities.
- Authorize Federal grants to institutions of higher education for library materials and construction, on a broad geographic basis, with priority to those most urgently requiring expansion and improvement.

- Enact a Federal grant program administered by the Department of Health, Education, and Welfare for the development and expansion of new graduate centers. Increase funds requested in the 1964 budget for expansion of the National Science Foundation program of science development grants.

- Extend and expand the current modern foreign language program aiding public and private institutions of higher learning.

Improvement of Educational Quality

- Expand the National Science Foundation science and mathematics course materials program and the Office of Education educational research programs.

- Broaden the Cooperative Research Act to authorize support of centers for multipurpose educational research, and for development and demonstration programs; and broaden the types of educational agencies eligible to conduct research.

- Expand the National Science Foundation program for teacher training institutes in the natural sciences, mathematics, engineering, and social sciences in order to provide for upgrading the knowledge and skills of 46,000 teachers.

- Grant: (1) broader authority for teacher institutes financed by the Office of Education, now restricted to school guidance counselors and language teachers, to other academic fields; (2) authority for a program of project grants to help colleges and universities improve their teacher preparation programs by upgrading academic courses and staff, by encouraging the selection and retention of their most talented prospective teachers, and by attracting and training teachers from new sources such as retired military personnel or women whose family responsibilities permit them to teach; and (3) authority for training grants through colleges and universities for teachers and other education personnel requiring specialized training, with particular emphasis on the training of teachers of the mentally retarded and other handicapped children, teachers of gifted or culturally deprived children, teachers of adult literacy, librarians, and educational researchers.

Strengthening Public Elementary and Secondary Education

- Provide a 4-year program to assist States in undertaking through their own State plans selective and urgent improvements in public elementary and secondary education including: (1) increasing starting and maximum teacher salaries and increasing average teacher salaries in economically disadvantaged areas; (2) constructing classrooms in areas of critical and dangerous shortage; and (3) initiating pilot, experimental, or demonstration projects to meet special educational problems, particularly in slums and depressed rural and urban areas.

- Extend the National Defense Education Act programs in guidance counseling and testing and for purchasing mathematics, science and modern foreign language equipment which contribute to improving the quality of elementary and secondary education.

- Provide a 4-year continuation of those portions of the school assistance for federally affected area laws which expire June 30, 1963.

Vocational and Special Education

- Provide funds which would permit doubling the number of workers to be trained by the Manpower Development and Training Act programs.

- Expand the scope and level of vocational education programs supported through the Office of Education by replacing the Vocational Education Act of 1946 with new grant-in-aid legislation aimed at meeting the needs of individuals in all age groups for vocational training in occupations where they can find employment in today's diverse labor markets, and provide employment and training opportunities for unemployed youth in conservation and local public service projects.

Continuing Education

- Authorize Federal grants to States for expanding university extension courses in land-grant colleges and State universities.

- Authorize a program to assist all States in offering literacy and basic education courses to adults.

- Amend the Library Services Act by authorizing a 3-year program of grants for urban as well as rural libraries and for construction as well as operation.

MENTAL RETARDATION IS A CONDITION CHARACTERIZED BY THE FAULTY DEVELOPMENT OF INTELLIGENCE

The DEGREE of retardation varies greatly among individuals:

60,000-90,000 persons are PROFOUNDLY or SEVERELY retarded

300,000-350,000 persons are MODERATELY retarded

5-6 million persons are MILDLY retarded

The NUMBER of mentally retarded persons is increasing:

126,000 infants are born each year who will be mentally retarded

Without decisive advances the number of mentally retarded persons will increase by ONE MILLION in the 1960's

The CAUSES of mental retardation are not fully known:

15-25% of the cases involve specific diseases or brain damage

75-85% of the cases are caused by incompletely understood factors

MENTAL ILLNESS AND MENTAL RETARDATION

In a special message to Congress on February 5, 1963, the President proposed a bold new approach to the twin problems of mental illness and mental retardation that are of such tremendous size and tragic impact. Too long have they been considered problems unpleasant to mention, easy to postpone, and despairing of solution. The proposed program, designed to use Federal resources to stimulate State, local, and private action, encompasses prevention, treatment, rehabilitation, research and manpower development.

A NATIONAL PLAN FOR MENTAL HEALTH

The President directed the Secretary of the Department of Health, Education, and Welfare to explore steps for encouraging and stimulating the expansion of private voluntary health insurance to include mental health care. He made the following legislative recommendations as initial developments in a national program for mental health that within a decade or two could halve the number of patients now under custodial care:

Community Mental Health Centers

- Authorize grants to the States for the construction of community mental health centers and short-term project grants for the initial staffing of such centers.

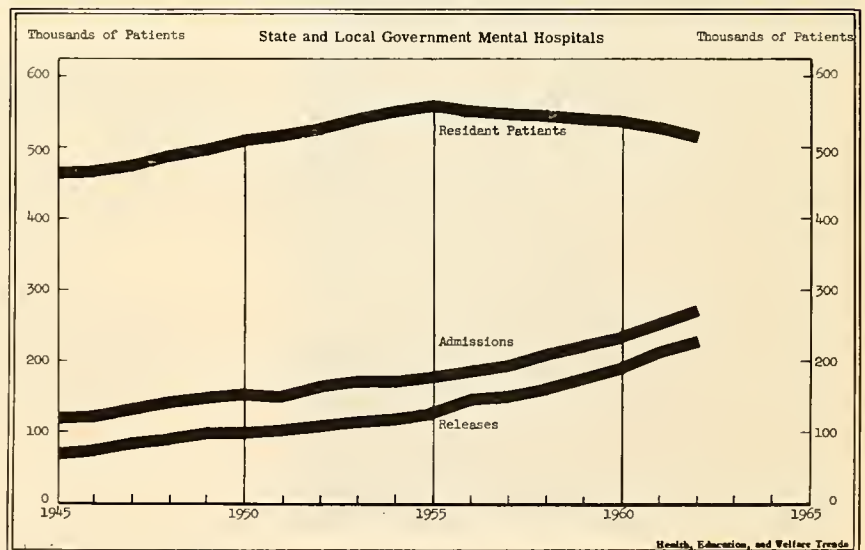
- Appropriate \$4.2 million for mental health planning grants.

Research and Manpower

- Appropriate \$66 million for training purposes to increase the availability of trained manpower for research and other mental health programs.

Improved Care in State Mental Institutions

- Appropriate \$10 million for the support of projects to improve the quality of care in State mental institutions and to provide in-service training for personnel in these institutions.



A NATIONAL PROGRAM TO COMBAT MENTAL RETARDATION

The President pointed out the complex and unique nature of the problem of mental retardation and the need for a broad approach that would meet the medical, psychological, social, educational, and vocational needs of the mentally retarded. He then outlined the action necessary to implement such a program:

Prevention

- Provide project grants to stimulate the development of comprehensive maternal and child health care service programs, directed primarily to families in high risk groups.
- Double the authorization for Federal grants for maternal and child health and crippled children's programs from the present \$25 million to \$50 million for each program by 1970.
- Commit at least 10 percent of the proposed aid to elementary and secondary education to special project grants to improve educational opportunities in slum and distressed areas.

Community Services

- Provide special project grants for financing State reviews of needs and programs in the field of mental retardation.
- Permit up to 18 months of rehabilitation services for mentally retarded persons for the determination of vocational rehabilitation potential.
- Provide financial assistance in the construction, equipping, and staffing of rehabilitation facilities and workshops for the mentally retarded.
- Authorize matching grants for the construction of facilities for the mentally retarded.
- Appropriate initially \$5 million for project grants to upgrade the quality of residential services in State institutions.

Research

- Authorize funds for the construction of centers for research in human development, including the training of scientific personnel.
- Expand the authority of the Children's Bureau for engaging in research in maternal and child health and crippled children's services.

HEALTH PROGRAM

Addressing Congress on February 7, 1963, President Kennedy ranged broadly over areas affecting our Nation's health that "require serious and sustained attention." These areas include: teaching facilities for doctors, dentists, and nurses; encouraging group practice and health research; planning grants and construction aid for health facilities; controlling air pollution; bringing together environmental health and community health functions into bureaus; cooperating in community and international health services; strengthening and improving vocational rehabilitation; and ensuring the safety of food, drugs, devices, and cosmetics.

To these ends the President made legislative recommendations which would:

Education for Physicians and Dentists

- Provide Federal matching grants for the construction of new, and the expansion or rehabilitation of existing, teaching facilities.
- Provide Federal financial assistance for students of medicine, dentistry, and osteopathy.

Nurses' Education

- Provide financial assistance to expand teaching facilities for nurses' training.
- Provide financial assistance to students of nursing.
- Initiate new and improved programs for the support of graduate nursing education.
- Initiate new programs and expand current programs of research directed toward improved utilization of nursing personnel.

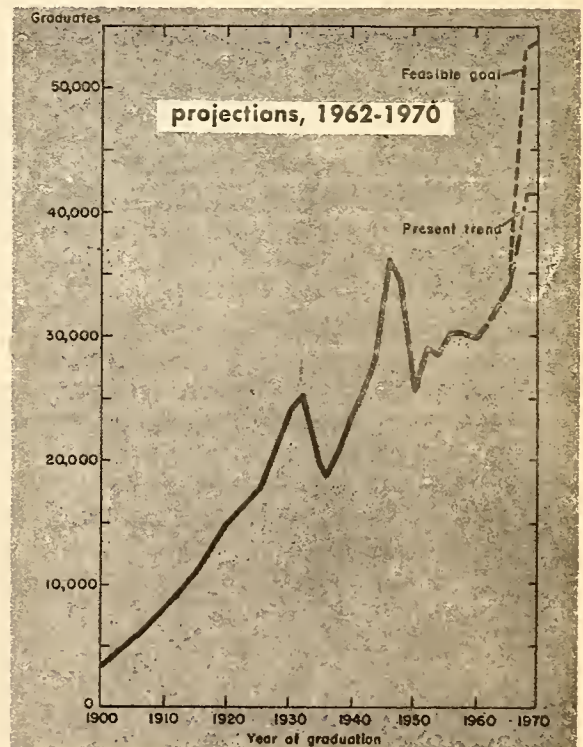
Encouragement of Group Practice

- Authorize a five-year program of Federal mortgage insurance and loans to help finance the cost of constructing and equipping group practice facilities for medicine and dentistry.

Health Research

- Increase appropriations for support of the National Institutes of Health.

Graduates of basic professional nursing programs

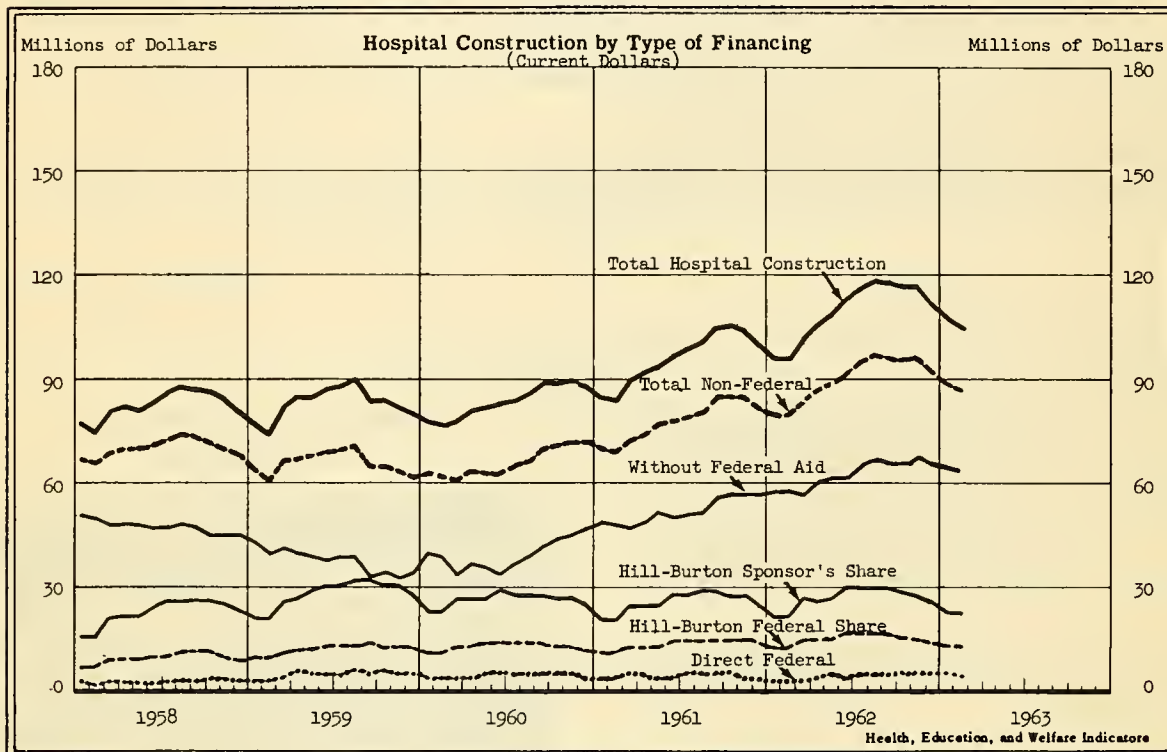


Health Facility Planning Grants

- Authorize planning grants to public and nonprofit organizations to assist in developing comprehensive areawide plans for the construction and operation of all types of health facilities.

Aid for Construction of Hospitals and Nursing Homes

- Extend the 16-year-old Hill-Burton program for five years, but modified to authorize (1) a new program of financial assistance for modernizing or replacing hospitals and other health facilities, and (2) increased appropriations for nursing homes.



Air Pollution Control

Authorize the Public Health Service to:

- Engage in a full investigation of the causes, effects and control of air pollution.
- Provide financial stimulation to States and local air pollution control agencies.
- Conduct studies on air pollution problems of interstate or nationwide significance.
- Take action to abate interstate air pollution.

Environmental Health

- Grant authority to the Surgeon General to bring environmental health functions together in one bureau.

Community Health Services

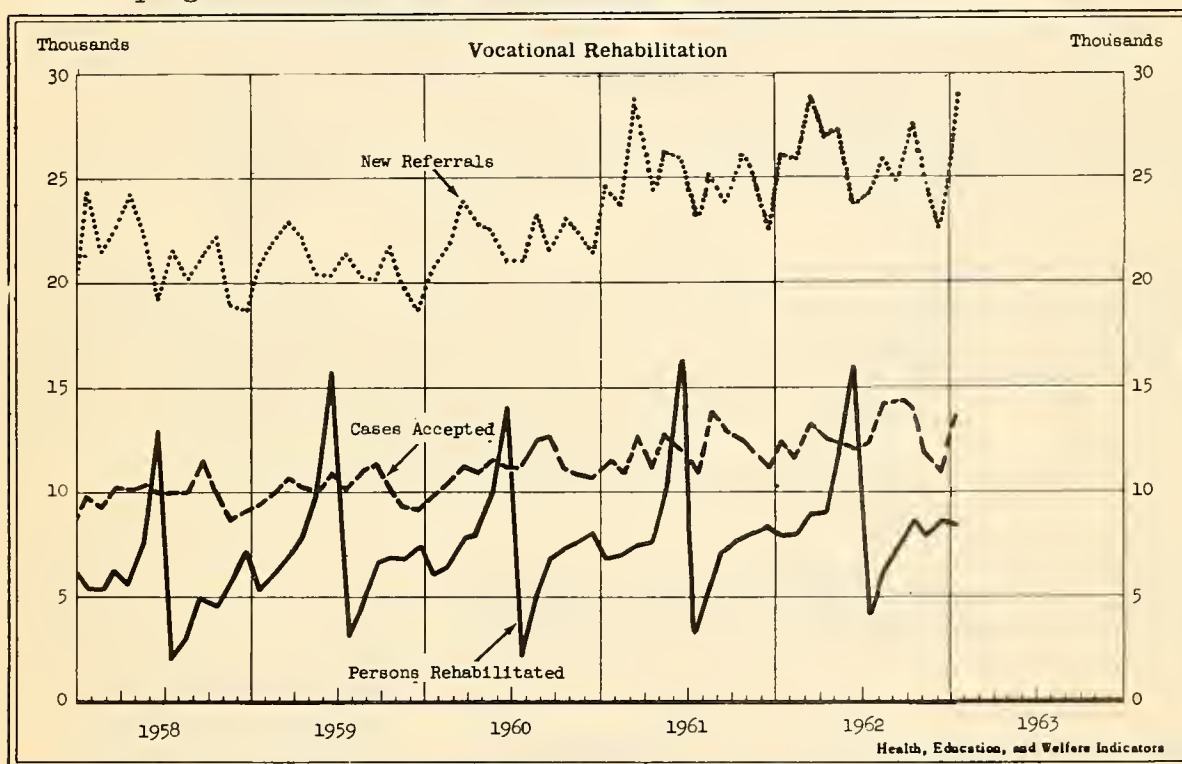
- Grant authority to bring all community health activities of the Public Health Service together in one bureau.
- Provide funds to initiate programs under both the Vaccination Assistance Act and the Migrant Health Act passed last year.

International Health

- Provide funds under the 1964 budget proposal to initiate efforts to eradicate the yellow fever-carrying mosquito from the United States as pledged in accordance with the policy of the Pan American Health Organization to eliminate yellow fever in this hemisphere.

Vocational Rehabilitation

- Increase funds for, and otherwise strengthen and improve, the State-Federal program of vocational rehabilitation.



Food, Drugs, Devices, and Cosmetics

- Extend and clarify inspection authority
- Require cosmetics to be tested and proved safe before marketing.
- Require Manufacturers of therapeutic devices to assure the reliability of their products, and require proof of safety and effectiveness before such devices are put on the market.
- Extend requirements for label warnings to include hazardous household articles.

OUR NATION'S YOUTH

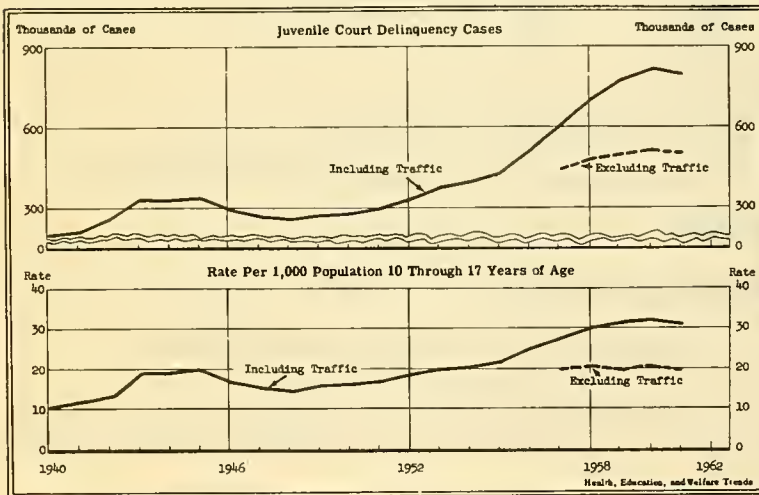
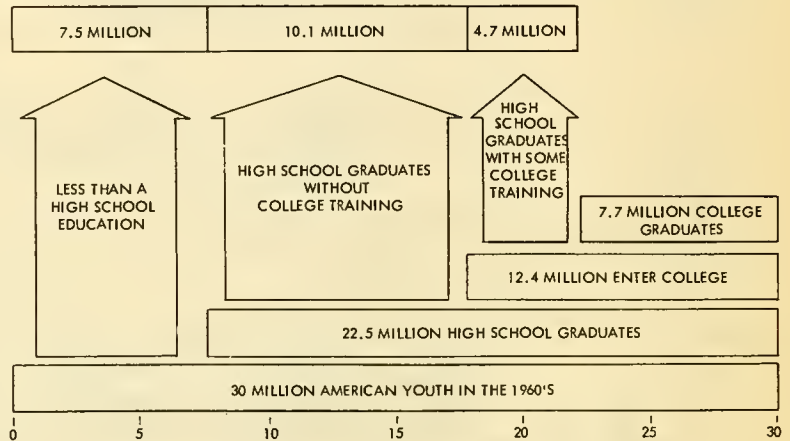
The Presidential Message on Our Nation's Youth, sent to Congress on February 14, 1963, is the first special Message on Youth by a President of the United States. Dwelling initially on the great expansion of the youth population of our Nation and the consequent economic, social, and educational problems, the Youth Message outlines five specific programs designed to improve opportunities for young people in the United States.

Problems of American Youth

The 30-percent increase in the birth rate between the 1930's and 1947 contributed to the increase in the number of youths under 20 from 46 million in 1945 to 70 million in 1961 and an increase relative to the total population from 33 to 39 percent. The school population grew correspondingly. This year the number of persons 16 years of age will be more than a million greater than last year.

Youth unemployment is characteristic of the youth population increase. Unemployment among workers today is $2\frac{1}{2}$ times the national unemployment average and is even higher among young Negroes and those without a high school diploma. During the 1960's some $7\frac{1}{2}$ million students will drop out of high school.

22.3 MILLION YOUTH WILL NEED PREEMPLOYMENT TRAINING IN THE 1960'S



Youth delinquency is another problem of vital concern. In the last decade, juvenile delinquency cases brought before the courts more than doubled, and recorded arrests of youth increased 86 percent.

Programs for Youth Opportunity

To counteract these serious problems and to provide greater opportunities for all young people able to take advantage of them, the Administration has developed and proposed specific programs which are outlined in the Youth Message:

(1) Under the Manpower Development and Training Act of 1961 the Federal Government is assisting State and local officials to provide additional training for out-of-school youth at the community level. The 1,900 local public employment offices have accelerated their programs of counseling, testing, and placement services for youth workers.

(2) The Youth Employment Act of 1963, now before the Congress, would provide employment initially for 15,000 young men in youth conservation camps. Jobs in local public service employment would be provided for up to 50,000 young men and women annually in public and private agency employment.

(3) The proposed National Service Corps would provide an opportunity for as many as 5,000 American citizens 21 and over to work in voluntary service programs in all parts of the Nation. This "domestic peace corps" would provide an opportunity for skilled and dedicated people to work on some of our most difficult and critical problems such as mental retardation, with migrant workers and their children, with delinquent youth, and in helping young students who are having difficulties in our crowded schools in urban and slum areas.

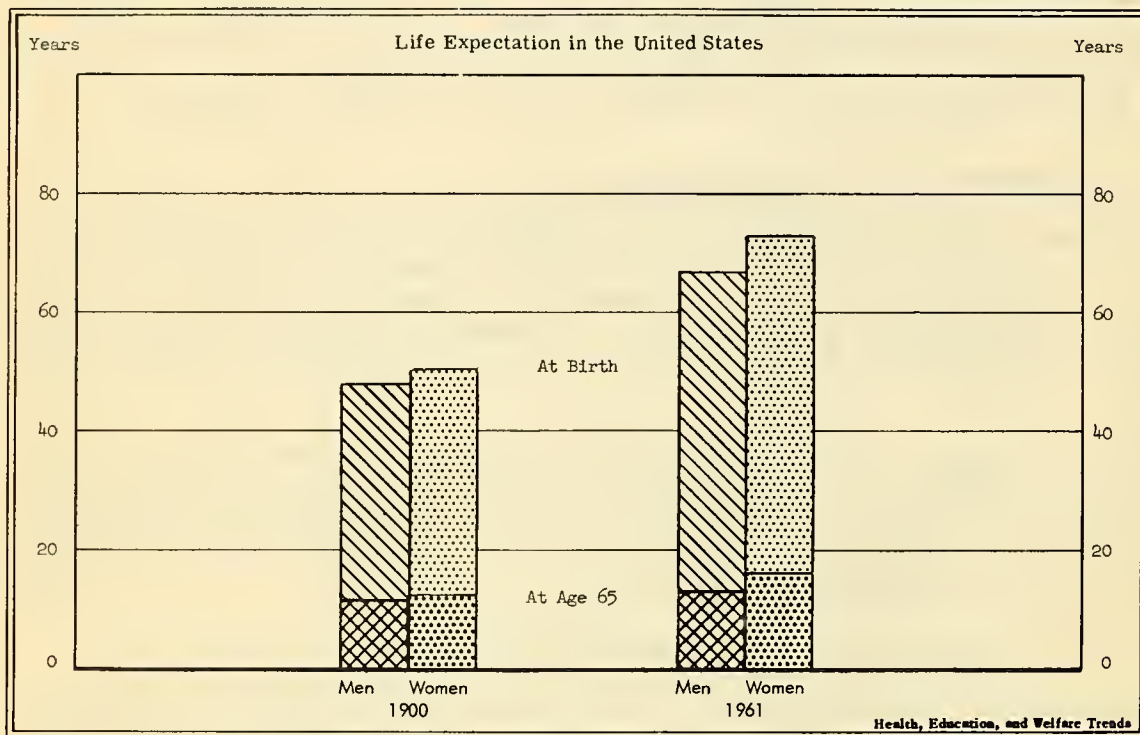
(4) The Peace Corps has already demonstrated its effectiveness and usefulness overseas. In the two-year period of its operation almost 45,000 American men and women, the majority of them young people, have volunteered their services. In January of this year there were 4,000 volunteers 30 years old or younger in training or in service in 44 countries.

(5) The Juvenile Delinquency and Youth Offenses Act of 1961 set in motion a new Federal program to develop comprehensive community programs for the prevention of delinquency. In 16 cities demonstration and planning projects are now underway. Agencies and institutions have been brought together to develop a community-wide program of juvenile delinquency prevention. At 31 universities training institutes give specialized training to governmental and youth agency officials working with young people and counter-ing juvenile delinquency.

The President's Youth Message takes note of the fundamental importance of a good educational opportunity for every American youth and the necessity of good health and physical fitness. The President's Council on Youth Fitness has given leadership and direction to programs--during the 1961-62 school year 56 percent of the 108,000 public schools strengthened their physical education programs and some 2,000 private and church-related schools offered physical education for the first time.

ELDERLY CITIZENS OF OUR NATION

On February 21, President Kennedy became the first President ever to send to the Congress a special message relating to our elderly citizens. The President pointed out that the presence today of $17\frac{1}{2}$ million people aged 65 years and over--nearly one-tenth of our total population and increasing by 1,000 per day--reflects a profound change in the age composition of our Nation. "This increase in the life span and in the number of our senior citizens presents this Nation with...the opportunity to draw upon their skill and sagacity and the opportunity to provide the respect and recognition they have earned." But he pointed out, through certain "sobering statistics," that there are attendant problems.



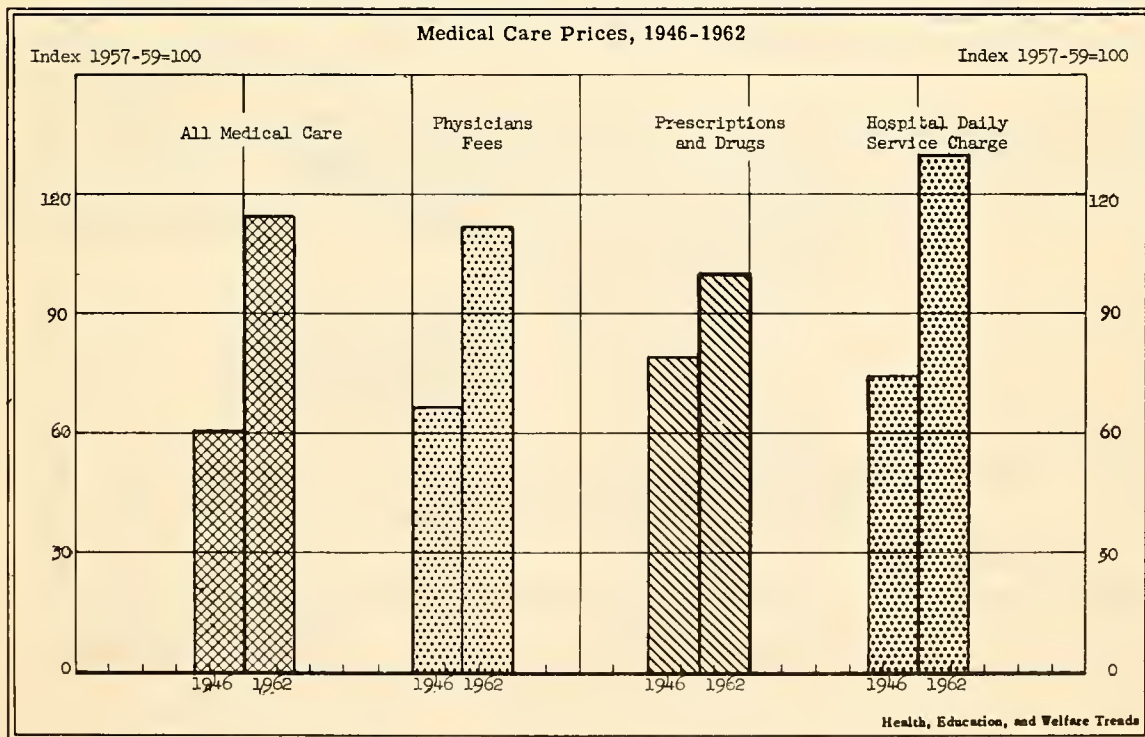
The average annual income received by aged couples is half that of younger two-person families; almost half of those over 65 living alone receive \$1,000 or less a year. A far greater proportion of senior citizens than of younger citizens live in inferior housing. Older people are sick more frequently and for more prolonged periods than the rest of the population; yet only half of those aged 65 and over have any kind of health insurance.

The President proposed 36 specific points looking toward improvement of these conditions and the translation of the scientific achievement of longer life into effective human achievement. The result of these recommendations--legislative and executive--if carried out, would be to:

Health

- Provide a hospital insurance program for senior citizens under the social security system.

- Improve the medical care provision under public assistance through (1) encouraging those States which have not already established programs for the medically indigent aged to do so, and (2) strengthening the program in those States where existing programs are incomplete.
- Strengthen the basic welfare law authorizing medical care for persons on old-age assistance by providing medical protection to the indigent at least equal to that provided for those who are only medically indigent.
- Strengthen the program also through elimination of the 42-day limit on medical care in a general hospital provided for persons suffering from mental illness or tuberculosis.
- Increase the Hill-Burton appropriation authorization for high quality nursing homes from \$20 million to \$50 million.
- Increase medical facilities and services through: (1) enactment of previously recommended legislation authorizing Federal matching funds for construction of new, and expansion or rehabilitation of existing, teaching facilities for the medical, dental and other health professions; (2) Federal financial assistance for students of medicine, dentistry, and osteopathy; (3) revision of the Hill-Burton hospital construction program to enable hospitals to modernize the rehabilitate their facilities; and (4) financial assistance for the construction and equipping of group-practice medical and dental facilities.
- Expand Food and Drug Administration consumer protection for the elderly by extending provisions of the Food, Drug and Cosmetic Act of 1938: (1) to include testing of the safety and effectiveness of therapeutic devices; (2) to extend label warning requirements to include household articles subject to the Act; (3) to extend adequate factory inspection to foods, over-the counter drugs, devices, and cosmetics; and (4) to provide additional information to consumers to enable them to make more informed choices in the purchase of foods and drugs.

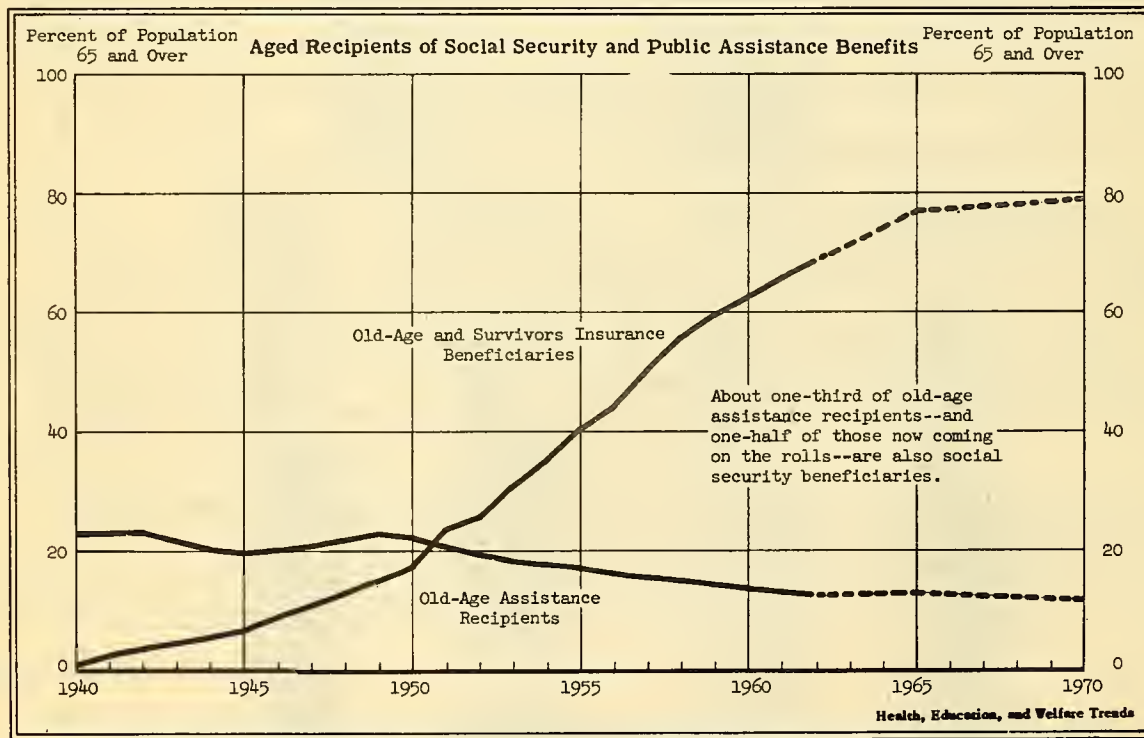


Education and Use of Leisure Time

- Provide a basic-education attack upon illiteracy.
- Increase support of adult education, making available at reasonable tuition fees those courses of interest to the elderly.
- Extend library services for the elderly in particular.
- Stimulate the use of older people in teacher preparation and programs as part of realizing their unutilized potential.

Employment Opportunities

- Require each Federal agency--and urge all employers, public and private--to honor fully both the spirit and letter of official Federal policy to evaluate each older applicant or employee on the basis of ability rather than age.
- Increase funds for (1) the Federal-State Employment Service to strengthen and expand counseling and placement services and (2) training programs under both the Manpower Development and Training Act and the Area Redevelopment Act.
- Establish a new 5-year program of grants for experimental and demonstration projects to stimulate needed employment opportunities for the aged.
- Make a searching reappraisal through the President's Council on Aging in consultation with private organizations and citizens of employment problems for the aged.
- Provide opportunities for voluntary services by older persons in the National Service Corps and the Peace Corps.



Welfare and Income Maintenance

- Increase the maximum taxable wage base on which Social Security benefits are computed from \$4,800 to \$5,200 a year, and reexamine the entire relationship between benefits and wages (through the Advisory Council on Social Security Financing to be appointed by the Secretary of Health, Education, and Welfare).
- Improve old-age assistance through reduction of residence requirements to a maximum of one year by 1970, and permit Federal participation in protective payments made to a third party in behalf of needy aged individuals.
- Authorize, as a condition for receiving Federal grants for old-age assistance, the establishment and maintenance in State plans of standards of health and safety for rental housing for old-age assistance recipients.
- Reduce and equalize the tax burdens of older persons, through a number of provisions in the Administration's tax reduction and reform measures.

Housing

- Provide additional funds for the direct loan programs for senior housing and for rental housing for the elderly in rural areas.
- Emphasize construction of group residence facilities with access to appropriate health and social services for older people who require assistance in certain aspects of daily living.
- Extend eligibility for moderate income housing to single elderly persons.
- Develop a program to assist older citizens with the modernization, rehabilitation, or sale of their individually owned homes.

Community Action

- Assist States to assign specific responsibility for stimulating and coordinating programs on aging in Each State government and in every locality of 25,000 or more population.
- Provide a 5-year Federal grants program to assist the States and communities in developing comprehensive community programs for the elderly through grants for planning, research, demonstration and training, and for the construction of multipurpose recreation and activity centers.



THE FIRST DECADE: CHANGE AND CHALLENGE

This year marks the tenth anniversary of the Department of Health, Education, and Welfare--the newest Federal agency to be represented in the President's Cabinet. However, the responsibilities it bears for the well-being of the American people date back to the early years of our Republic.

They began in 1785, when the Congress of the Confederation made grants of public lands to the States for public schools.

They were added to in 1798, when the Fifth Congress established the Marine Hospital Service--forerunner of today's Public Health Service.

In 1867 the Federal Office of Education was established; in 1907 the Food and Drug Administration began as the Bureau of Chemistry in the Department of Agriculture; in 1912 the Children's Bureau was established; in 1920 the predecessor of the present Vocational Rehabilitation Administration began its important work; and in 1935 the Social Security Board was organized.

All these agencies were brought together in 1939 under the framework of the Federal Security Agency, and 14 years later the Agency was given Cabinet status when it became the Department of Health, Education, and Welfare.

In this chronology of the Department's growth, we can trace the Nation's growing recognition of the need for Federal participation in promoting the general welfare of the American people. Through periods of prosperity and depression, through civil strife and world conflict, the Federal Government has shared in the national concern for the well-being of every citizen.

We are now in an era of change and challenge which in many ways eclipses those critical periods of our past.

We are in the midst of a technological revolution which is changing the pattern of life and work of the American people.

As our national strength and prosperity have increased, we have grown more and more aware of pressing problems within our society which cry out for solution--problems of great magnitude and complexity that are beyond the resources of the individual and his local and State governments.

Some of these problems have long been with us and require solution even more urgently today; some are the outgrowth of the technological forces which are altering our society; others have arisen as a natural consequence of the higher human expectations of larger numbers of citizens.

In education, for example, we have a shortage of facilities and well-trained teachers at the same time that we face increasing demands for more schooling for more people. We have millions of young people and millions of adults whose lack of adequate education prevents them from enjoying a full measure of the Nation's prosperity and from making their full contribution to society.

Our aged men and women, those in the lowest income group and most subject to illness, have tragically inadequate insurance against the high cost of hospital care and related health services.

Other problems in our society represent an appalling waste of human lives and human potential: mental illness and mental retardation, drug addiction, accidents, juvenile delinquency.

Increasingly we are concerned with problems of air and water pollution, and the proliferation of chemicals in the production and processing of foods.

In the following pages are summarized the progress this Department has made during the past decade in carrying out its responsibilities for the well-being of the American people.

As we review the successes of the Department's first ten years, let us look forward to a second decade of helping to make available to all citizens full opportunities for the development of their talents and abilities. These are our most precious resources--our hope for the future.

A handwritten signature in black ink, reading "Anthony Celebrezze". The signature is fluid and cursive, with a large, stylized initial 'A' and a long, sweeping underline.

Secretary of Health, Education, and Welfare

THE TENTH ANNIVERSARY OF THE DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Wilbur J. Cohen and Joseph W. Kappel

Creation of the Department of Health, Education, and Welfare on April 11, 1953, culminated more than 30 years of effort by citizens who believed that the Federal government needed an agency of cabinet status to carry out effectively its constitutional responsibility for "promoting the general welfare." Only by such action could the health, education, and welfare interests of the American people receive their due consideration at the policy-making level of the President's Cabinet.

The changing concept of the Federal government's responsibility with regard to the general welfare over a hundred year period is evident when one contrasts the establishment of the Department of Health, Education, and Welfare in 1953 with the veto in 1854 by President Pierce of Dorothea Dix's bill for a grant of land to support the indigent curable and incurable insane in the United States. Despite "the deep sympathies of (his) own heart," the President vetoed this bill on the grounds that it was not proper nor constitutional for the Federal government to provide "for the care and support of all those...who, by any form of calamity, become fit objects of public philanthropy."

Much has happened since that veto message was written. The importance of the change in viewpoint concerning the Federal government's responsibility is demonstrated by the overwhelming, bipartisan support in the Congress when the legislation creating the Department in 1953 was enacted. After passage in the House by a vote of 291 to 86, it was approved by a voice vote in the Senate.

Senator Taft on that occasion said: "I am very much pleased that we have finally reached our objective. We have sought for a long time to give to the three agencies affected representation in the Cabinet, the policy-making section of the Government, immediately under the President. These activities of the Federal Government are tremendously important to the welfare of the Nation, although the Federal Government does not undertake to assume primary direction in the three fields."

Senator Humphrey stated that: "...the plan meets a long felt need for participation by the Federal government in the services of health, education, and welfare. I concur in the view expressed by the Senator from Ohio (Mr. Taft) that the essential function of the proposed Department would be the carrying out of present programs, which are, in the main, State-aid programs, and represent mechanisms for cooperation between the Federal government, State governments, and local institutions and governments in the field of health, education, and welfare."

Mr. Cohen is the Assistant Secretary for Legislation and Mr. Kappel is a member of his staff as a Program Analysis Officer.

Health, Education, and Welfare Indicators, April 1963

Demographic and Economic Background

Any account of the Nation's programs of health, education, and welfare during the past ten years can be properly assessed only when viewed against the backdrop of the dramatic growth of our population and economy in recent decades. In the period for which figures are obtainable most closely matching the ten years of the Department's history, the population increased by an unprecedented 30 million (July 1952 to July 1962). In 1963 the total population had reached 188 million people.

In 1962 we had over 17 million persons aged 65 and over, as compared with 13 million in 1952; our school-age population, largely concentrated in the 5 to 19 age group, numbered 52 million in 1962, as compared with 37 million in 1952. In the brief 30 months since the 1960 Census the school-age and younger population (under age 20) increased by over 4 million, while the adult working age population (20-64 years) increased by over 2 million.

Looking ahead to the next decades, a total population of about 250 million persons is estimated by the year 1980.

Aside from sheer growth, a remarkable feature of our demographic development in recent decades has been the shift from farm to city. While the population in urban areas increased by 28 million between 1950 and 1960 to a total of 125 million, the rural population actually declined from 54 million to 53 million. We have become an urban society with problems of health, education and welfare concentrated in urban-suburban areas.

The period 1953-1963 has been notable not only for its great increase of population but also for the vast growth of the American economy. The gross national product grew from \$365 billion in 1953 to \$554 billion in 1962. Personal income increased during this period, and per capita disposable personal income rose from \$1,582 in 1953 to over \$2,000 in 1963. At the same time, there were rises in the cost of living.

A significant factor from the standpoint of the programs of the Department of Health, Education, and Welfare has been the unusual increase in the cost of medical care. Whereas the overall consumer price index rose from 93.2 to about 106.0 during the past decade, the index for medical care increased from 83.9 to 115.0. Most important of all, analysis of the medical care index reveals that physician's fees were consistent with the overall increase, and prescriptions and drugs declined somewhat, but the "hospital daily service charge" component rose from 74.8 in 1953 to over 131.0 in 1963. In dollars, this means that hospital care now averages more than \$35 a day. This is the most dramatic increase in the consumer price index.

Some Significant Developments in Health, Education, and Welfare, 1952-1962

Item	1952	1962
Mental hospital patients per 100,000 population	389	333 ^{1/}
Paralytic poliomyelitis cases	21,269	709
Hospital expense per patient day	\$18.35	\$34.98
per patient stay	\$138.73	\$267.37 ^{1/}
Number of children under age 18	50,200,000	67,400,000
Elementary and secondary school enrollments	30,600,000 ^{2/}	46,700,000
College and university enrollment	2,302,000 ^{2/}	4,600,000 ^{3/}
Educational expenditures (billions)	\$11.3	\$27.3
Old-age and survivors insurance beneficiaries	5,026,000	18,053,000
OASI payments per retired worker (monthly)	\$49.25	\$76.19
Number of aged 65 and over	13,000,000	17,300,000
Recipients of old-age assistance	2,646,000	2,226,000
Vocational rehabilitants	63,632	102,377

^{1/} 1961. ^{2/} 1951-52. ^{3/} 1962-63.

Total Expenditures for Health, Education, and Welfare

The Federal role in health, education, and welfare, substantial as it is, is but one segment of a large national effort to which important contributions are made by State and local governments and by private individuals and organizations. All of these activities amounted to a total expenditure, public and private, on health, education, and welfare, of \$42 billion in 1953; by 1963 this amount had increased to \$101 billion. During this period, the ratio between private and public expenditures remained fairly constant, with \$1 in private funds expended for approximately each \$2 of public funds.

Of the \$101 billion* estimated expenditures on health, education, and welfare in 1963:

\$34 billion was spent for health--25 percent from public funds and 75 percent from private funds;

\$28 billion was spent for education--80 percent from public funds and 20 percent from private funds;

\$41 billion was spent for social insurance and welfare--86 percent from public funds and 14 percent from private funds.

* The adjusted total of \$101 billion eliminates duplication in use of income-maintenance payments (public and private) for private purchase of health or education services. A complete tabulation of these expenditures is presented in the June issue of Indicators. For an explanation of what is included in these figures see Ida Merriam's "Social Welfare Expenditures, 1960-61," in the November 1962 issue of the Social Security Bulletin.

The significant roles of the public and private sectors of our society in assuming the financial burden of these enormous expenditures demonstrate the viability of a highly important and indeed unparalleled partnership in our society among private individuals and organizations, their local and State governments, and the Federal government.

Major Changes in Programs

In 1954, Federal payments to States for the needy and destitute constituted 72 percent of the Department's total budget (excluding old-age and survivors insurance benefit payments), whereas they comprise only 51 percent of the Department's budget in 1963. This decrease in comparative importance of programs for the needy during a time when the total budget of the Department has increased symbolizes the major changes in the Department's programs during its first ten years.

During this period, the other programs of the Department have experienced a five-fold expansion from a level of \$540 million to \$2.5 billion. While almost all of the Department's programs have shared in this growth, the major developments have been in the following three program areas:

- (1) Medical research programs of the National Institutes of Health;
- (2) Federal-State assistance programs in community and environmental health, especially in construction grants for hospitals and sewage treatment plants;
- (3) Federal aid to elementary, secondary, and higher education under the omnibus provisions of the National Defense Education Act.

The key feature of this ten-year period is patently a change of emphasis from amelioration to prevention and rehabilitation. The newly-born Department of Health, Education, and Welfare took over functions which in large measure looked back to problems created by past emergencies or depressions and other types of crisis, functions designed to help people adversely affected by these problems, whereas the Department of 1963, while making a major effort to improve its "ameliorative" programs, is stressing solutions to present and emerging problems and opportunities.

Legislative Developments

The shift in emphasis from amelioration to prevention has developed, in large measure, by means of the major legislative changes in the fields of health, education, and welfare that have been enacted over the past ten years. This legislation has effected needed improvements and new directions in basic statutes governing the programs of the Department, and has also established important new programs of Federal assistance to the States and local communities to help solve pressing health, educational and social problems.

Social insurance has been strengthened in its role as the first line of defense against economic insecurity through legislative improvements that have broadened the coverage and strengthened the financial base of the program, raised benefit levels, and added a new category of benefits for disabled workers and their families. The supportive role of assistance programs has been given new dimensions by the Public Welfare Amendments of 1962, which emphasize preventive and rehabilitation services and the training of competent staff, and provide the States with new tools for making welfare programs more effective. Extension and improvement of vocational rehabilitation services have grown out of the Vocational Rehabilitation Amendments of 1954, which strengthened the financial base of rehabilitation programs and improved resources and facilities through more effective use of available Federal funds.

Public Health legislation during the past decade has emphasized the preventive approach through new programs of Federal grants for environmental health control, of grants to promote research toward the prevention and cure of the physical and mental diseases of man, and of grants-in-aid for the construction of diagnostic centers, rehabilitation facilities, and nursing homes, and by strengthening the existing regulatory powers of the Federal government with respect to food, drugs and cosmetics.

The role of education as an indispensable factor in economic growth and the maximization of individual potential has been given statutory recognition in the National Defense Education Act, which has as its purpose "....the fullest development of the mental resources and technical skills of (the Nation's) young men and women."

Major HEW Legislative Developments, 1953-1962

During the ten year period, Congress enacted more than 120 pieces of health, education, and welfare legislation, of which 27 were major new or amended programs.

No brief discussion can do justice to the important and many-faceted laws which have been enacted by the Congress during this decade. Even the list which follows, within space limitations, only enumerates the most important.

Listed first are enactments which initiated fundamental changes; in a second group are those changes in or additions to existing programs which are of only slightly less importance.

Basic Legislation	Date Enacted	Public Law
<u>HEALTH</u> <u>Environmental</u> <u>Air Pollution Control Act of 1955.</u> Provides for studies, investigations, and dissemination of information and for grants and contracts for research, training, and demonstration projects in the field of air pollution control. <u>Federal Water Pollution Control Act Amendments of 1956.</u> Provide for comprehensive programs for water pollution control; interstate cooperation; research, investigation, and training; grants for water pollution control programs; grants for construction of treatment works; enforcement measures against pollution of interstate water, etc. Supplants the Water Pollution Control Act of 1948 (P.L. 845, 80th Congress). <u>Federal Water Pollution Control Act Amendments of 1961.</u> Broaden and strengthen the <u>Federal Government's pollution abatement powers</u> in this field, provide for a greatly stepped up program of <u>grants</u> for waste treatment works, authorize increased Federal support of State and interstate pollution control programs, provide for an intensified program of <u>research</u> into more effective methods of pollution control, and establish the principle of <u>water quality</u> control as a criterion in planning and building Federal reservoirs. <u>Manpower and Facilities</u> <u>Health Amendments Act of 1956.</u> Assists in increasing the number of adequately trained professional and practical <u>nurses and professional public health personnel</u>, and in the development of improved methods of care and treatment in the field of <u>mental health</u>. <u>Medical Facilities Survey and Construction Act of 1954.</u> Amends the hospital survey and construction provisions of the Public Health Service Act (title VI) to provide grants for surveying the need for, and for constructing, diagnostic or treatment <u>centers, hospitals</u> for the chronically ill and impaired, <u>rehabilitation facilities</u>, and nursing homes.	July 14, 1955 July 9, 1956 July 20, 1961 Aug. 2, 1956 July 12, 1954	84-159 84-660 87-88 84-871 83-482

Basic Legislation (cont.)	Date Enacted	Public Law
<u>Health Research Facilities Act of 1956</u> (adds title VII to Public Health Service Act). Authorizes grants for construction of health research facilities.	July 30, 1956	84-835
<u>FOOD AND DRUG</u>		
<u>Pesticide Amendment of 1954</u>. Amends Federal Food, Drug, and Cosmetic Act with respect to residues of pesticide chemicals in or on raw agricultural commodities.	July 22, 1954	83-518
<u>Food Additives Amendment of 1958</u>. Amends the Federal Food, Drug, and Cosmetic Act to prohibit the use in food of additives which have not been adequately tested to establish their safety.	Sept. 6, 1958	85-929
<u>Kefauver-Harris Amendments ("Drug Amendments of 1962")</u> to Federal Food, Drug, and Cosmetic Act. Broaden factory inspection authority with respect to prescription drugs; require <u>adequate safety and quality controls</u> in drug manufacture; <u>require new drugs to be cleared for efficacy</u> (as well as safety) before they are marketed, permit summary <u>suspension of new-drug clearance</u> if there is an imminent hazard to public health, and otherwise improve new-drug regulation; require batch-by-batch certification of all antibiotics for treatment of humans; require prescription drug <u>advertisements</u> to be more informative; authorize standardization of non-proprietary <u>drug names</u>; require <u>registration</u> of drug manufacturers.	Oct. 10, 1962	87-781
<u>EDUCATION</u>		
<u>Cooperative Research (in Education) Act of 1954</u>. Authorizes contracts or jointly financed cooperative arrangements with universities and colleges and State educational agencies for the conduct of research, surveys, and demonstrations in the field of education.	July 26, 1954	83-531
<u>Library Services Act</u>. Authorizes <u>grants</u> to States to promote the further extension of public library services to <u>rural areas</u> without such services, or with inadequate services.	June 19, 1956	84-597

Basic Legislation (cont.)	Date Enacted	Public Law
<u>National Defense Education Act of 1958</u>. Provides, among other things, for college and university <u>student loans</u>; grants and loans for strengthening elementary and secondary school <u>instruction in science, mathematics, and modern foreign languages</u>; <u>fellowships for graduate study</u>; payments for programs of <u>guidance, counseling, and testing in secondary schools</u>; university centers for study in "<u>rare</u>" modern languages and <u>institutes for teachers of modern foreign languages</u>; grants and contracts for research and experimentation in the use of radio, television, motion pictures, and related <u>communications media</u> for educational purposes; <u>grants for area vocational education programs</u>; and <u>grants to improve statistical services</u> of State educational agencies.	Sept 2, 1958	85-864
<u>WELFARE AND INCOME MAINTENANCE</u>		
<u>Social Insurance and Protection</u>		
<u>Social Security Amendment of 1954</u>. Amend the Social Security Act and the Internal Revenue Code to <u>extend coverage</u> under the old-age and <u>survivors insurance program</u>, <u>increase the benefits</u>, preserve the insurance rights of <u>disabled individuals</u>, and increase the amount of earnings permitted without loss of benefits.	Sept. 1, 1954	83-761
<u>Social Security Amendments of 1956</u>. Provide <u>disability insurance</u> benefits for certain <u>disabled individuals</u> who have attained age 50, <u>reduce to 62 the age</u> on the basis of which benefits are payable to certain women, provide for child's insurance benefits for <u>children</u> who are <u>disabled</u> before reaching age 18, and further extend coverage.	Aug. 1, 1956	84-836
<u>Social Security Amendments of 1960</u>. Extend and <u>improve coverage</u> under OASDI and remove hardships and inequities, improve the <u>financing of the trust funds</u>, and provide <u>disability benefits</u> to additional individuals under such system, provide <u>grants to States for medical care</u> for aged individuals of low income, amend the public assistance and maternal and child welfare provisions.	Sept. 13, 1960	86-778

Basic Legislation (cont.)	Date Enacted	Public Law
<u>Public Assistance and Child Welfare</u> Public Welfare Amendments of 1962. Assist the States in providing more rehabilitation services in order to get individuals off the welfare rolls and in developing better trained staffs to render these services; in increasing payments to the aged, the blind, and the disabled; in improving the aid to dependent children program, to provide for protective payments, payments on the basis of the unemployment of the parent, community work and training programs, and payments to children removed by court order to foster home care, etc. Provide for gradually doubling the amount authorized for annual child welfare appropriations from \$25 million to \$50 million per year; for gradually expanding child welfare services throughout each State by July 1, 1975; for special projects for training personnel for work in the field of child welfare, including traineeships; and for earmarking up to \$10 million of Federal child welfare funds for day care services. <u>VOCATIONAL REHABILITATION</u> Vocational Rehabilitation Amendments of 1954. Amend the Vocational Rehabilitation Act to promote and assist in the extension and improvement of vocational rehabilitation services, provide for more effective use of available Federal funds, and otherwise improve the provisions of that Act.	July 25, 1962 Aug. 3, 1954	87-543 83-565

Legislation Effecting Major Program Changes	Date Enacted	Public Law
<u>HEALTH</u> <u>Indian Health Services Act.</u> Transfers the administration of health services for Indians and the operation of Indian hospitals to the Public Health Service. Authorizes the transfer of <u>Freedmen's Hospital</u> to Howard University and the construction of a new and modern <u>teaching hospital</u> for Howard's program of medical teaching, research, and service to the community.	Aug. 5, 1954 Sept. 21, 1961	83-568 87-262

Legislation Effecting Major Program Changes (cont.)	Date Enacted	Public Law
<u>FOOD AND DRUG</u>		
<u>Federal Hazardous Substances Labeling Act.</u> Regulates labeling of hazardous substances in household-size containers which may cause substantial personal injury or substantial illness. Replaces the Federal Caustic Poison Act, except with respect to foods, drugs, and cosmetics, which remain subject to the latter Act.	July 12, 1960	86-613
<u>Color Additive Amendments of 1960.</u> Amend the Federal Food, Drug, and Cosmetic Act to authorize the use of suitable color additives in or on foods, drugs, and cosmetics, in accordance with regulations prescribing the conditions (including maximum tolerances) under which such additives may be safely used.	July 12, 1960	86-618
<u>TRAINING AND RETRAINING</u>		
<u>Area Redevelopment Act.</u> Provides for Federal financial assistance for industrial projects, public facilities, urban renewal, and occupational retraining in designated areas of chronic unemployment and underemployment. The Secretary of Health, Education, and Welfare is responsible for providing assistance for occupational retraining of persons referred to him by the Secretary of Labor, through contracts with State vocational education agencies or with educational institutions.	May 1, 1961	87-27
<u>Manpower Development and Training Act of 1962.</u> Authorizes the Secretary of Labor to determine the skill requirements of the economy, encourage the development of programs, including on-the-job training, to equip the Nation's workers with the new and improved skills that are required; makes Secretary of Health, Education, and Welfare responsible for entering into agreements with States to provide occupational training to unemployed or underemployed persons referred to him by the Secretary of Labor, etc.	March 15, 1962	87-415
<u>WELFARE AND INCOME MAINTENANCE</u>		
<u>Social Insurance and Protection</u>		
<u>Servicemen's and Veterans' Survivor Benefits Act</u> (includes Public Health Service officers; also amends Title II of the Social Security Act). Extends coverage under the OASDI program to	Aug. 1, 1956	84-881

Legislation Effecting Major Program Changes (cont.)	Date Enacted	Public Law
members of the uniformed services on a contributory basis.		
<u>Social Security Amendments of 1958. Increase benefits under OASDI, improve actuarial status of the Trust Funds, and amend the public assistance and maternal and child health and welfare provisions of the Social Security Act.</u>	Aug. 28, 1958	85-840
<u>Public Assistance</u>		
<u>Public Welfare Amendments of 1961. Amend Title IV of the Social Security Act to authorize Federal financial participation in aid to dependent children of unemployed parents; also includes Federal payments for foster home care of dependent children, one-year extension of appropriation authorization for training grants for public welfare personnel, and increases maximum medical care expenditures (in behalf of old-age assistance recipients) with respect to which there will be Federal participation.</u>	May 8, 1961	87-31
<u>Juvenile Delinquency</u>		
<u>Juvenile Delinquency and Youth Offenses Control Act of 1961. Provides for Federal assistance for projects which will demonstrate or develop techniques and practices leading to a solution of the Nation's juvenile delinquency control problems.</u>	Sept. 22, 1961	87-274

Legislative Developments, 1961-1962

In both 1961 and 1962 President Kennedy sent to the Congress special messages on education and health. In addition the President transmitted special messages in 1962 on public welfare and consumer protection--these were subjects of Presidential messages for the first time. During the past two years, Congress enacted and President Kennedy approved 26 significant legislative improvements in health, education, and welfare. These enactments brought about needed improvements and changes in the basic programs of the Department. In addition, important new programs of Federal assistance to States and local governments were initiated which will be of great significance in the solution of health and social problems.

Legislation Enacted, 1961-1962	Public Law
<u>HEALTH</u>	
Drug Amendments of 1962	87-781
Federal Water Pollution Control Act Amendments of 1961	87-88
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Federal Budget and Departmental Appropriations

During the period under review, Federal budget expenditures increased from \$74 billion in 1953 to \$94 billion in 1963, and the Department of Health, Education, and Welfare's appropriations rose from \$2 billion to \$5 billion. The gross national product increased from \$365 billion in 1953 to over \$550 billion in 1963. The Department's appropriations amounted to .06 percent in 1953 and .09 percent in 1963--still less than one percent of the gross national product.

A consistent aspect of the Department's expenditures has been that 90 percent of its funds are allocated in the form of grants to States, local communities, and institutions. Despite the increase in these programs, Department of Health, Education, and Welfare grants have actually declined as a percentage of total grants of the Federal government. Whereas the Department's grants amounted to 63 percent of total Federal grants in 1953, they had declined to 41 percent in 1963. This change is accounted for by increased Federal expenditures for highways and airport construction, housing and urban redevelopment, preservation of national resources, and promotion of agriculture.

A comparison of the appropriations for the programs of the Department of Health, Education, and Welfare in fiscal year 1954 (its first full year) and in fiscal year 1963 reveals important changes in emphasis. As noted above, appropriations moved up from almost \$2 billion in 1954 to over \$5 billion in 1963. Grants to the States for public assistance increased substantially in this period, reflecting such factors as the increase in the number of recipients of aid to dependent children and frequent Congressional enactment of amendments increasing the Federal share of welfare payments and adding new categories of recipients. These Federal payments to States for the needy and destitute account for the great bulk of appropriations to the Department, an amount which is governed by the magnitude of State action and State expenditures on these programs.

Intra-mural Operations

In contrast with the grant programs of the Department, the direct (intra-mural) activities have averaged about 10 percent of the Department's funds. The largest single activity in this category in recent years is direct research, mostly health research of the National Institutes of Health. Another large amount, almost one-quarter of intra-mural funds, finances patient care activities through the Indian health program, the Public Health Service hospital system, Saint Elizabeths Hospital for the mentally ill, and Freedmen's Hospital. Among other intra-mural activities, significant sums are used for regulatory programs such as that of the Food and Drug Administration, for civil defense activities, and for special foreign currency research programs.

Administration of the large grant programs of the Department took about six-tenths of one percent of the total funds of the Department, excluding trust funds.

Staff

As Congress has added new responsibilities, the staff of the Department has grown from about 37,000 in 1954 to approximately 82,000 in 1963. Of this total, 45 percent were engaged in administering the old-age, survivors, and disability programs (the cost of which is not borne from general revenue funds), 22 percent for patient care programs, and 19 percent for direct research and technical assistance to the States.

The largest part of the staffing increase between 1954 and 1963 is accounted for by the social security (OASDI) program. Annual benefit payments under this program will reach \$15 billion in 1963. A portion of the OASI growth is attributable to the national increase in workload deriving from population growth, and part to the frequent amendments to the Social Security Act which have been enacted by the Congress, giving social security coverage to more people, creating the disability benefit program, and modifying and liberalizing the existing benefits. A testimonial to the efficient operation of this program has been the remarkably small proportion of contribution income-- $2\frac{1}{2}$ percent--represented by administrative costs.

Apart from the far flung organization of the Social Security Administration, the next largest single group of employees in the Department are those engaged in the direct care of patients in the Public Health Service Hospitals, which provide care for merchant seamen, American Indians, and other Federal beneficiaries, and in Saint Elizabeths and Freedmen's Hospitals in the District of Columbia. The expansion of staff in these programs is related to the expansion of coverage and the improvement of the quality of this care.

A third large block of employees are those carrying out direct medical research and the administration of research grant programs on the National Institutes of Health campus at Bethesda. The increase of about 7,000 employees over the period is primarily a measure of the extraordinary emphasis placed by the Congress on this field of endeavor in the past ten years.

Increases of lesser magnitude, but still very significant, have been experienced in most other departmental programs, particularly those concerned with research and technical assistance to States and local communities in the fields of community and environmental health, and the consumer protection programs of the Food and Drug Administration.

Towards the Future

At the close of the Department of Health, Education, and Welfare's first decade certain signposts pointing to the activities of the Department during the following decade had become visible. The change of emphasis from amelioration to prevention and development was fortified by increased emphasis within the Office of the Secretary upon program interests which are found in more than one agency of the Department, as a result of the related responsibilities of the agencies. Major attention has been devoted to strengthened programs in the field of aging, juvenile delinquency, mental retardation, consumer protection, manpower development and training, and educational television. In recent years the international responsibilities of the Department had expanded considerably along with an increasing realization around the world that social reforms are major factors in national growth and stability.

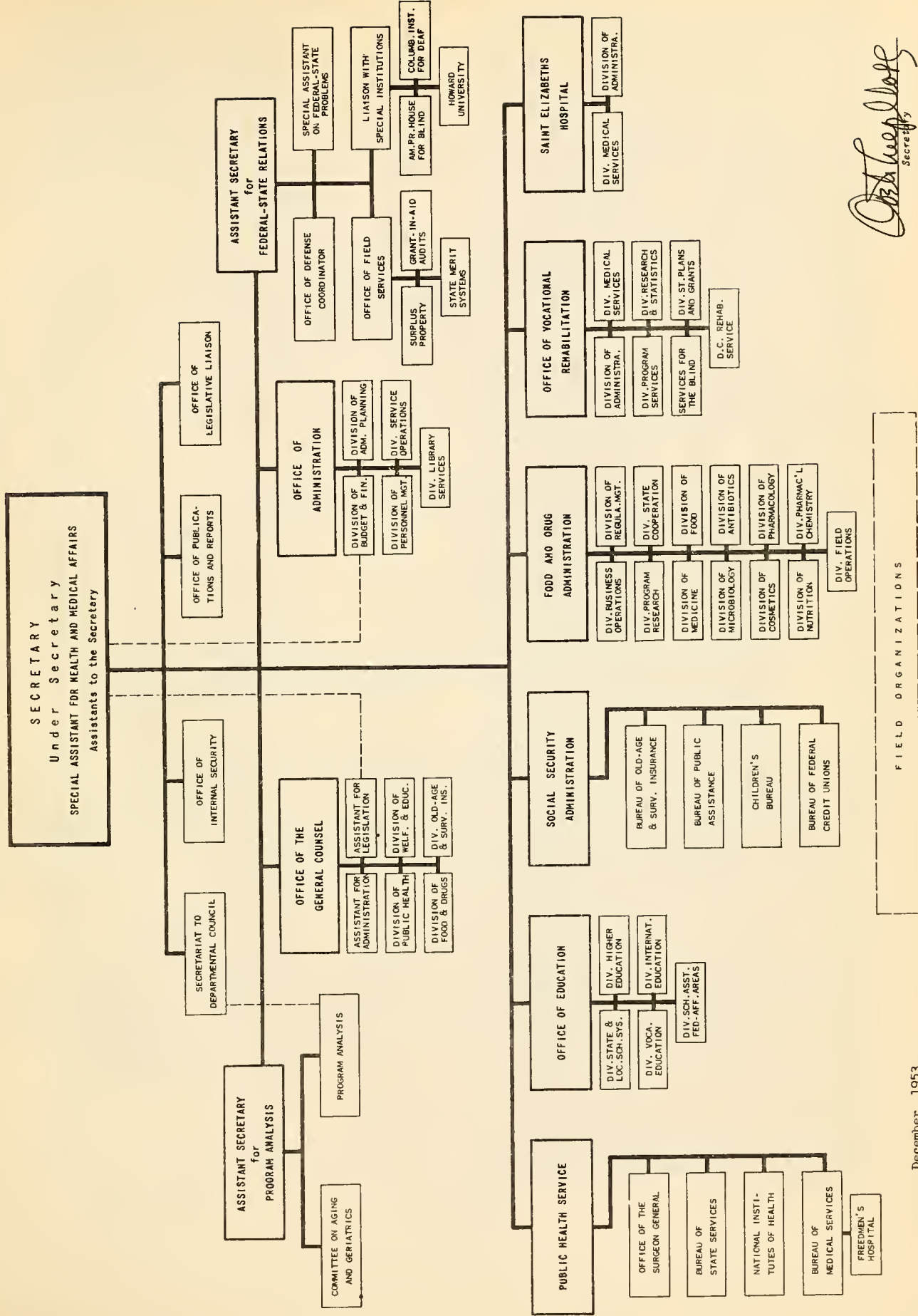
At the very end of its first ten years the Department undertook its most important organizational change by creating a new Welfare Administration, separating the Children's Bureau and the Bureau of Family Services from the Social Security Administration in order to give added prominence to these major programs.

Proposals for Federal action to further improve the Nation's health, education, and welfare have been made by President Kennedy this year in five special messages dealing with education, health, mental health and mental retardation, youth, and aging. The last three topics were the subjects of a special Presidential message for the first time in history. These messages indicate the areas in which improvements in existing programs are desirable and necessary.

Departmental Organization and Agency Developments, 1953-1963

The Departmental developments during the past ten years, as described above, have added a considerable number of new responsibilities to the programs of each agency of the Department. In response to these added responsibilities, a number of organizational changes were necessary. On the following pages, organizational charts showing the structure of the Department in 1953 and in 1963 are reproduced. Following the charts, a brief account of each agency's developments during the decade is presented. A final page reviews developments in the three educational institutions (Gallaudet College, Howard University, and the American Printing House for the Blind) which are supported by the Department.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE : 1953



FIELD ORGANIZATIONS



Over the past decade the Public Health Service broadened its support of research studies, training of research personnel, and construction of research facilities by private, nonprofit institutions. The scope of research conducted has undergone similar expansion: a 500-bed Clinical Center was opened at the National Institutes of Health in 1953; the seventh institute in the NIH complex--the Institute of Allergy and Infectious Diseases--was established in 1957; and in 1962 Congress approved the creation of Institutes of General Medical Sciences and of Child Health and Human Development.

Highlights of research by PHS scientists and grantees include advances in cancer chemotherapy and in open heart surgery, development of vaccines against influenza and upper respiratory infections, improved drugs for arthritics and mental patients, and the partial "cracking" of the genetic code. Emphasis has been placed on training grants, fellowships, and traineeships to help increase the Nation's supply of doctors, nurses, and other specialized medical and health personnel. Over \$1 billion has been spent since 1953 under the Hill-Burton program for the construction of hospitals, nursing homes, and other health facilities.

A major national effort against environmental health hazards has gained momentum, resulting in the establishment of a number of new Public Health Service divisions and field laboratories. Legislation since 1953 has provided authority for expanded programs to study and control air and water pollution. In 1958 responsibility for the collection, collation, and dissemination of data on environmental radioactivity was delegated to the Service by the Secretary of DHEW. Radiological health activities were intensified following the resumption of atmospheric nuclear testing in 1961. Continued progress has been made in combatting occupational health hazards and general sanitation problems, including food-borne diseases.

The critical need for comprehensive health services led to passage of the Community Health Services and Facilities Act of 1961 which authorizes PHS grants for community studies and demonstrations to develop new or improved out-of-hospital services, particularly for the aged and chronically ill. The health standards of American Indians and Alaskan Natives have been steadily improved through a broad program of preventive and curative medical services since responsibility for health care was transferred from the Department of the Interior to the Public Health Service in 1955.

A National Library of Medicine was established in 1956; work began in 1961 on an electronic data processing system known as MEDLARS to improve the capacity to store, retrieve and disseminate information. Major PHS components engaged in measuring the Nation's health status were brought together in 1960 in a National Center for Health Statistics.

The retirement in October 1962 of Dr. Winfred Overholser, long Superintendent of Saint Elizabeths, provided an occasion for assessing the many changes that have taken place at the Hospital:

Patient Movement. There was a reversal of the long-term climb in the number of patients in the Hospital but turnover and general patient activity increased. From a peak of 7,278 patients in June 1955, the average patient census declined at an accelerating rate to 6,771 in June 1962. The number of patients on visit or leave statuses rose from about 250 to over 1,100. Admissions increased by 41 percent from 1,438, ten years ago, to 2,024 in 1962; discharges doubled from 814 to 1,649. Voluntary admissions increased two and one-half times.

Changes in Staff and Facilities. The staff grew from 2,500 employees to 3,700, and the number of physicians increased from 43 to 82, but staff shortages are still acute. Since 1956 several new buildings have been opened including one for the admission and treatment of patients under age 64, an inter-faith chapel, a maximum security building, and a physical rehabilitation building. Older buildings, equipment, and furnishings are being refurbished, and appropriations have been made for a psychiatric-rehabilitation center.

Changes in Treatment Methods and Programs. The use of tranquilizing drugs was shown to be effective; psychosurgery (lobotomy) was discontinued. Racial integration was achieved without notable incident. The development of the "therapeutic community" was begun; studies of the inter-relationships of staff, personnel and patients, and partial self-government by patients was initiated. A successful re-employment program for rehabilitated patients was developed. Publication of the report of the Joint Commission on Mental Health stressed new concepts of patient care, and a vigorous attempt was made, with increasing success, to send patients out to nonmedical facilities.

Developments of National Significance. The Durham Decision of 1954 initiated constructive changes in attitudes toward criminal responsibility of the mentally ill. The Hospital Centennial was observed in 1955 with a two-day scientific program featuring papers read by U. S. and foreign psychiatrists and subsequently published in book form. The Clinical Neuropharmacology Research Center (1957), and the Behavioral and Clinical Studies Center (1961) were established in collaboration with the National Institute of Mental Health. A 1960 statute made certain U. S. nationals who become mentally ill while abroad eligible for admission to the Hospital. In 1962 an effort toward educating the general public regarding mental illness was made in a series of 26 five-minute transcribed broadcasts, heard in every State over some 450 radio stations.

THE FOOD AND DRUG ADMINISTRATION, 1953-1963

For the Food and Drug Administration, the past decade has been one of steadily increasing responsibility and correspondingly rapid growth. Scientific progress, new legislation, and a new public awareness of the importance of consumer protection contributed to the evolving pattern.

Much of the change was stimulated by new product development in the regulated industries. Miraculous new chemicals for agriculture, strange new additives for processed foods, life-saving but potentially dangerous new drugs, and useful but hazardous household chemical aids demanded stronger controls to keep public benefits and public risks in balance.

Marking a new trend in consumer protection, the principle of premarketing safety clearance by the Government, pioneered for new drugs and color additives in 1938, was extended to pesticides in 1954 and to additives for processed foods in 1958, and was further strengthened for color additives in 1960. In each case safety controls were provided to limit the amounts of new chemicals allowed in consumer products. These controls aim for prevention of harm rather than after-the-fact punishment or correction of violations. The burden of proof of safety is on the manufacturer.

The Hazardous Substances Labeling Act of 1960 contains labeling requirements aimed at protecting children and others from accidental injury from the many hazardous chemicals in use and storage in every household.

The Kefauver-Harris Drug Amendments of 1962 represent another milestone in consumer protection legislation. This new law extends the premarketing clearance principle to require that new drugs be proved both safe and effective before they are marketed, and provides other new controls to assure the integrity of drugs.

To keep pace with scientific and legislative developments, FDA has increased its scientific staff and broadened its scientific competence to assure proper evaluation of the safety of products for their intended use. Through application of the most modern methods and equipment, FDA has become one of the world's leading laboratory institutions in the analysis of foods, drugs, and evaluating the safety of additives.

The mid-1950's had found the Food and Drug Administration at a low point in its ability to discharge its responsibilities. Despite rapidly multiplying problems in consumer protection, there were fewer enforcement personnel in 1955 than in 1941. Actions against frauds and cheats had to be stopped in order to carry out programs directly related to the public health.

A Citizens Advisory Committee appointed by the Secretary in 1955 to study FDA's responsibilities and resources pointed up the need for additions to staff, better facilities, and better equipment. The Committee report managed to communicate FDA's needs, and marked a turning point that presaged an era of growth and development. Appropriations increased from \$5.6 million in 1953 to \$28.3 million in 1963; budgeted positions rose from 829 in 1955 to 3,012 in 1963. A new headquarters building in Washington is nearing completion, and new and improved laboratories have been provided for 11 of the 18 district offices.

Since becoming a part of the Department of Health, Education, and Welfare on April 11, 1953 (P.L. 83-13), the Office of Education has passed through the most significant period in its 96-year history as the primary education agency of the Federal Government. The original mandate of the Office for gathering statistics and facts has been strengthened by legislative enactments. The Office identifies needs, evaluates resources, and provides professional and financial assistance to strengthen areas of education where there is an urgent national interest.

Financial aid for research, experimentation, and demonstration to extend basic knowledge in education was made possible through legislation in 1954 (P.L. 83-531). The Cooperative Research Program enables projects to be supported in such fields as: retention of students, special abilities, mental retardation, staffing of schools and colleges, school and college organization and administration, instructional subjects of special concern, such as mathematics, sciences, and modern foreign languages, and the teaching of English. The Office disseminates information and seeks ways to translate into theory and ultimately into practice in education the findings of the research completed.

Other significant programs that have been added by new legislation during the past ten years include: A grant-in-aid program to assist States in extending public library services to rural areas was provided by the Library Services Act of 1956 (P.L. 84-597, as amended). The most significant financial assistance for education which was added during the ten-year period was the National Defense Education Act of 1958 (P.L. 85-364, as amended). It authorized more than \$1 billion in Federal aid from elementary through graduate school with student loans being the largest single item in the program. Federal assistance for the retraining of unemployed or underemployed persons has been provided by the Area Redevelopment Act of 1961 (P.L. 87-415). A ten-year program of \$1 million a year in grants to institutions of higher learning and to State educational agencies to encourage expansion of education in the teaching of the mentally retarded was authorized by the Education for the Mentally Retarded Act of 1958 (P.L. 85-926, as amended). Grants to educational institutions that are training teachers of the deaf, and for scholarships, are provided by the Training Teachers for the Deaf Act of 1961 (P.L. 87-276).

The Office has continued during the past decade to collect, analyze, and publish national statistics on education at all levels.

THE SOCIAL SECURITY ADMINISTRATION, 1953-1963

The social security programs were significantly improved and expanded during the decade since the establishment of the Department of Health, Education, and Welfare. Disability benefits were added to the old-age and survivors insurance program and the coverage of the system was extended to almost the entire working population. There were two general increases in benefit amounts, an additional increase in the minimum payable, and an upward adjustment for aged widows. Other liberalizations in the law included lowering the retirement age from 65 to 62, raising the amount that a worker can earn without losing benefits, and omitting up to 5 years of lowest earnings in calculating benefits. The number of beneficiaries more than tripled during the decade.

The Federal financial share in the public assistance programs was increased over the ten-year period, and provision was made for proportionately more help to those States where need is greatest and income and financial ability least. States were encouraged to extend and improve the medical care available to public assistance recipients, and a special program was started for elderly persons who are medically indigent.

Increasingly over the decade, the public assistance programs assumed the role originally intended for them, i.e., as supplementary to the basic social insurance program. With social insurance providing more and more effectively for minimum economic security, an increasing proportion of those on public assistance rolls were families with multiple problems and disadvantages. Provisions for social services by trained public welfare staff to such families and potentially dependent families were made in amendments to the Social Security Act.

Child welfare services were also expanded to better serve the current needs of the Nation. In this program and the maternal and child health and crippled children's programs, increased Federal financial support and leadership served to stimulate State and local action.

Intramural research in social security was expanded, moving toward the exploration of fundamental questions in the area of human resources and social welfare. Extramural research programs were initiated to acquire needed knowledge about causes and prevention of dependency, improvement of child welfare and reduction of delinquency.

Federal credit unions more than doubled their membership and tripled their assets to enhance their worth as a valuable adjunct to the social security programs. From 1958 on, the Bureau of Federal Credit Unions was supported entirely from fees for chartering and supervising local credit unions.

Responsibility for the Department's social security programs was realigned effective January 28, 1963. The Social Security Administration was made responsible for the programs of the Bureau of Old-Age and Survivors Insurance, the Bureau of Hearings and Appeals, and the Bureau of Federal Credit Unions; and a Welfare Administration was organized with responsibility for the programs of the Bureau of Family Services and the Children's Bureau, the work of the special staffs on aging and juvenile delinquency, and the Cuban refugee program.

THE VOCATIONAL REHABILITATION ADMINISTRATION, 1953-1963

Major progress has been made in rehabilitation of handicapped persons to productive and satisfying life. A new charter of operations passed in 1954 (P.L. 83-565) provided for expansion of the program of vocational rehabilitation through four major devices:

1. Adoption of a new grant-in-aid system to increase Federal and State funds for expanding services to disabled people. Rehabilitations rose from 55,800 in 1954 to 102,400 in 1962. Funds increased from \$36 million (\$23 million Federal and \$13 million State) in 1954 to \$173.4 million for 1963 (\$100.4 million Federal, \$73 million State).

2. Authorization of major programs of Research and Training. About 600 research and demonstration projects have been approved in many areas including mental retardation, mental illness, blindness, speech and hearing problems. Research funds of \$46.2 million have been committed. Teaching and training grants totaling \$47 million have enabled about 6,000 students to obtain training in short-supply professional fields.

3. Temporary authority and support of incentive grants to expand services and facilities brought establishment or improvement of 112 facilities and workshops at a cost of \$2.7 million in Federal and matching funds.

4. A continuing program of incentive extension and improvement grants, combined with regular support grants, have resulted in establishment or improvement of 280 facilities and workshops at a cost of \$14.4 million in Federal and State funds.

In 1954, the Congress also authorized Federal money for constructing community rehabilitation facilities under the Hill-Burton program. This has resulted in 234 facilities of various types from \$48 million of Federal funds and \$102 million of local money.

In the same year the Social Security Act was amended to protect the retirement rights of disabled workers under OASI, and subsequent amendments made cash benefits payable to disabled workers, first over age 50, and then for such workers and dependents regardless of age. In these amendments Congress brought the concept of vocational rehabilitation into integral relationship with disability protection and expressed a preference for State vocational rehabilitation agencies to make disability determinations of persons applying for disability benefits, simultaneously affording them an opportunity for vocational rehabilitation services.

The Vocational Rehabilitation Administration is encouraging State vocational rehabilitation agencies to conduct with public assistance agencies cooperative demonstrations of rehabilitation of public welfare clients. Four such projects are underway or in advanced planning stages in California, Oregon, Vermont and New Jersey; many more are expected within the year. The recent elevation in status from Office to Administration, coincident with creation of the Welfare Administration, underlines the importance of rehabilitation of dependents through cooperative effort.

Gallaudet College, the only college for the deaf in the world, was founded in 1864 to provide a liberal higher education for deaf persons who need special facilities to compensate for their loss of hearing. Gallaudet College's most significant development in the past ten years has been accreditation by the Middle States Association of Colleges and Secondary Schools. The completion of 8 new buildings during the past decade have enabled Gallaudet to accommodate an increased enrollment which now numbers 600 and includes students from all over the world. A milestone in the education of the deaf has been achieved with the admission of deaf students into the graduate program for training teachers of the deaf. Gallaudet College is one of the 40 colleges participating in the Program for Training Teachers of the Deaf under Public Law 87-276.

The most significant events which have occurred at Howard University in the past ten years include the establishment of programs leading toward the Doctor of Philosophy degree, begun in 1955 in the Department of Chemistry and expanded to the point where Ph.D. degrees are now offered in seven fields of study; the construction of nine new buildings, which have enabled the University to keep its physical plant abreast of academic expansions; the introduction of an academic program in African Studies; the election of Dr. James Madison Nabrit, Jr. as President of Howard University in July 1960. In addition, during the past ten years foreign student enrollment has grown to the point where Howard University now has the largest percentage of foreign students of any American university, approximately 16 percent of the total student body. Since 1953 national honor societies have been added in many areas of study, including the most renowned, Phi Beta Kappa and Sigma Xi.

The American Printing House for the Blind, which is the largest publishing house and manufacturer of special devices for the aid of the blind in the world, is the official channel through which the United States Government serves the States and the blind children in them. Allotments of credit are made to the schools for the blind and to the State departments of education against which they send in orders for materials manufactured at the American Printing House for the Blind based upon the number of children registered with this establishment by each State. This act has been amended several times, most recently in 1961 by Public Law 87-294, and is reviewed periodically to determine the adequacy of its provisions in light of changing developments in the field. The growing magnitude and complexity of the unmet needs in this area have been cause for increasing concern. Public Law 87-294 removes the limitation on the amount of appropriation and the provision for representation of State educational agencies on the board of trustees of the American Printing House for the Blind.

In 1879 about 2,200 pupils were being educated in our schools for the blind and the Federal appropriation to the Printing House that year amounted to \$10,000. In 1952 a total of 6,145 pupils were served under a Federal Quota of \$125,000. In 1962, 15,973 pupils were served under a Federal Quota of \$639,000. An additional \$41,000 were provided that year so that the Printing House could render advisory services to the States.

COMMUNITY NEEDS AND GOALS FOR COMMUNITY SERVICES

Irvin Walker and Eugenia Sullivan

This Nation has long been committed to the principle that each individual should have the opportunity to realize his full potential for productive living. To achieve this goal, the community must not only remove obstacles to personal development, but must also provide positive stimulus by making available to its citizens a wide range of coordinated community services.

In an era of unprecedented social and technical changes, the central challenge is to make certain that institutional arrangements in our society sensitively reflect the needs of individuals, families, and communities. The nature of the challenge that will face us in the decades ahead is fairly well indicated by social and economic trends which are clearly identifiable today.

Industrialization, urbanization, the development of suburban communities, technological changes and automation, and a highly mobile population have been associated with increased economic productivity, lengthening of life, shifts in the size and structure of the family and the increased participation of women in economic and community activities. Each of these changes, however fortuitous, has raised new problems in economic behavior, social organization, and human relations.

The trend toward urban-suburban living has given rise to an increased isolation of individuals and families and has focused fresh concern on the need to strengthen neighborhood and community bonds. The complexity of urban life in a highly fluid society has increased the urgency of identifying gaps in the institutional structure and of providing instruments for making services available to people who need them.

COMMUNITIES: DYNAMICS AND PROBLEMS

Population Growth

Planning to meet the health, welfare, educational, and related needs of the future must first of all take account of the expected growth of the population in the decades ahead. The population of the United States is increasing rapidly--currently at the rate of about 3 million a year--or the addition of a city nearly the size of Chicago each year. By 1980 the population will reach about 250 million, according to the latest Census Bureau projections.

Mr. Walker is a Program Analysis Officer and Miss Sullivan is a Staff Assistant in the Office of the Assistant Secretary (for Legislation). Excerpt from "Goals for Community Services" (February 28, 1963; 29 pages) prepared in the Office of the Assistant Secretary for Legislation, Department of Health, Education, and Welfare.

Health, Education, and Welfare Indicators, May 1963

Revised

Within this over-all growth, there is a striking shift in the proportion of people at both ends of the life span. The continuing increase in the school-age population, combined with a rising level of educational expectation, will necessitate greater investment in educational facilities and related services such as junior colleges, community libraries, school health services, and recreational centers.

By 1980 some 25 million people--ten percent of our population--will be aged 65 and over. Over the past decade, the most striking increase has been in the age group 75 and over, where the problems of old age become particularly acute. The rapid growth of the older population is a relatively new experience for many communities as well as for the nation.

Most communities are just now in the process of organizing services to meet the basic needs of older people; they are searching for precedents in other communities to guide them in the development of facilities and services; and there are few trained persons with a knowledge of aging capable of providing guidance to them.

The Implications of Urbanization

Moreover, the United States is rapidly becoming a nation of urban-suburban dwellers. About two-thirds of the American people live in metropolitan areas; by 1980, it is likely that 80 percent of the population will live in urban areas. Clearly visible trends show that there will be a continuing out-migration both from rural areas and from the big central cities, with the suburban areas registering large population gains. The flight of middle-class families to suburban areas will leave increasingly large concentrations of marginal and dependent individuals and families in the central cities.

As a result of population shifts, the social, economic and ethnic character of city populations is undergoing profound changes. Persons from impoverished rural areas are migrating to the large cities. At the same time the flight to the suburbs of the middle-class continues, particularly among families with young children seeking what they consider adequate living conditions and school facilities. The proportion of older people is higher in the central cities; an age distribution from the 1960 Census of residents of the 10 largest metropolitan areas (which contain about a fourth of the United States population) shows that 10.5 percent of the central city population is 65 or over while only 7.5 percent of the suburban population is in this older age group.

Many new in-migrants to the central cities are not equipped to cope with urban living. Many are unskilled; many are functionally illiterate. Lacking the most rudimentary tools of reading, writing, and mathematical skills, they are unable to fill out a job application, read work instructions, and in some cases cannot even read street and bus signs. Unless basic literacy education and job training are provided these people, they will remain permanently unemployed. Moreover, lack of skills and illiteracy are not confined to new arrivals in the cities; many long-time residents are among the marginal and dependent populations.

The loosening of family and neighborhood ties in urban areas has aggravated and increased social maladjustment. Juvenile delinquency, for example, is a serious problem in every large city in the United States. Over two-thirds of all delinquency court cases are handled in urban courts. The extent of delinquency among youth is greater than court case figures would indicate, since many instances of what may be termed delinquent behavior are dealt with outside the courts or may go undetected or unapprehended.

Thus, the central cities face rising pressures for services stemming from the fact that they have an increasing proportion of older people and the unskilled at a time when out-migration to the suburbs of both the well-to-do and industry drains their tax resources and decreases their ability to provide community services.

On the other hand, suburban areas in many instances are neither large enough nor sufficiently well organized and financed to meet the needs of their growing populations. Resources are strained as new streets, sewers, utilities, telephone lines, schools, libraries, community centers, churches, playgrounds, and the like must be built for the use of the growing population. At the same time, the central cities must continue to maintain services and facilities at the same, or indeed higher, cost while many of them are actually losing population--between 1950 and 1960 eight out of the ten largest cities in the United States lost population.

These changes have major implications for persons concerned with planning for current and emerging human needs. Relations between levels and units of government and concepts of civic responsibility clearly need re-appraisal and reshaping as more and more people work and have general daily contacts in a city, yet vote and pay taxes in suburban areas outside of the city.

Economic Change

Major public policy determinations are based on the prospects of and necessity for economic growth, with increased employment, expanded output, and higher standards of living. At the same time automation will continue to render obsolete many unskilled and semi-skilled jobs, and even some skilled jobs and occupations, creating unemployment and problems of dependency. This in turn points to the need for changing patterns of vocational education to train the nation's youth to perform useful work in our increasingly complex technology and to retrain those in the working force whose skills are undeveloped or have become obsolete.

According to the Department of Labor projections, in the next two decades there may be distinct imbalance in the labor force--a relatively constant percentage of workers in the 25 to 45 age group and a spectacular increase of older people and very young people. Indeed, workers under 25 are likely to account for nearly 50 percent of the labor force growth in the next 10 years.

Certain groups of persons are particularly vulnerable to long-term unemployment of a structural nature. Technological change presents special

problems for older workers when the skill that has been the basis for their entire work experience becomes obsolete in their present place of employment. Older persons are less mobile, also, because of such factors as family and community ties and home ownership.

The problem of structural adaptation of our manpower supply is not only one of readapting present members of the labor force to new jobs. The importance of appropriate education and training of new entrants into the labor force is apparent in the light of the fact that nearly one-third of all workers in our labor force in 1970 will have entered it during the 1960's.

Altered Patterns of Family and Community Living

The increase in the dependent population at both ends of the life span has placed new burdens on the family and has provided compelling need to effect a more equitable distribution of the costs of child rearing and old age. The typical family of the metropolitan area is made up of parents and their children. The large extended family of the past, which included grandparents, unmarried aunts, and others living in the same household, is disappearing. The result is that many services that family members formerly performed, such as child care and nursing services for the chronically ill, must now be sought outside the family. Moreover, families and individuals are becoming more and more mobile, with the result that people feel less identification with neighborhood and community institutions. Data from the Census Bureau show that one-half of all households moved at least once in the period 1955-59.

Increasing participation of married women, and particularly mothers, in the labor force may be expected to continue. In 1961 over one-fourth of the labor force was made up of married women (including widowed and divorced) and 8.7 million of these women, or 12 percent of the labor force, were mothers with children under age 18. These mothers represent about one-third of all mothers of children under age 18. Some 3.2 million of these working mothers have children under age 6. These trends point to the increasing need to provide substitute care for the children of working mothers.

Children from broken homes represent another problem of modern living. In 1959 of the 26.5 million families with children under age 18, 2.8 million (about 11 percent) were homes broken by death, divorce, or desertion. An increasing proportion of children receiving assistance under the aid to families with dependent children program are in families with the father "absent"--separated, estranged, divorced, or never married to the mother.

The proportion of children born out of wedlock has tripled in 20 years to a level of more than one in 20. Two out of five mothers of babies born out of wedlock are under 20 years of age; about 2 percent are under 15 years. While it is impossible to know precisely all the causes contributing to illegitimacy, studies show that certain environmental, socio-economic and psychological problems are often associated with it. Faulty parent-child relationships, instability of parents and a harmful social environment, crowded living conditions, inadequacy of food and clothing, lack of supervised recreational facilities, racial hostility, and segregation are all factors provocative of illegitimacy.

The plight of families with small and inadequate incomes stands out in contrast to the general prosperity enjoyed during the last decade. In 1960 some 22 percent of the families in the United States, with annual incomes of less than \$3,000 per family, contained more than 13 million children. Many of the families were of the types that have median incomes below the average--the family headed by a woman (\$2,968), the farm family (\$2,875), and the nonwhite family (\$3,233).

Health Problems

The considerable investment in medical research begun in the last decade will pay steadily increasing dividends of new medical knowledge. The time lag between the discovery and application of health knowledge is receiving increasing attention. It is reasonable to assume that, as the 1940's and 1950's were the decades of growth and emphasis in medical research, the 1960's and 1970's will see greater application of health knowledge.

These trends have been identified and described in various studies. However, perhaps the most significant concept for the future is just emerging. This is the proposition that comprehensive health services should be available where and when people need them.

The continued growth of population means an increased workload on already overburdened and overextended community health services. The increase in the younger and older age groups implies intensified demands since these two age groups are the heaviest per capita users of health services; and it also suggests an intensified economic burden, since the number of dependents per taxpayer will nearly double in the years ahead. Among the special health problems inherent in the trends for the future are the following:

1. Infant Mortality

Although the infant mortality rate dropped in 1961 to the lowest ever attained for the United States (25.3 per 1,000 births), it was higher than that of 10 other countries. The infant mortality rate in the United States is more than three-fifths higher than that of Sweden and the Netherlands. The disadvantaged groups in the United States, in particular the nonwhite, continue to have high infant mortality rates. The nonwhite infant mortality rate in large cities in 1960 was 43.2 per 1,000 live births as compared to 22.9 for whites. Infant mortality among reservation Indians in 1960 was estimated to be 46 per 1,000 births, nearly twice that of the general population.

2. The Chronic Diseases

Prominent among the resulting consequence of the aging population is the increased importance of the chronic diseases. Fifty years ago, 30 deaths in every 100 were attributable to chronic diseases; today, these deaths total 66 out of every 100. In addition, chronic diseases account for about 60 out of every 100 disabilities. The problem will grow as the aged population continues to grow.

Today's health care needs, especially in the case of long-term illnesses and disabilities, require, in addition to the private physician who is directly concerned with the care of individual patients, the support of a combination of institutions, including health departments, hospitals, chronic care facilities, nursing homes, clinics, diagnostic and rehabilitation facilities; and such specialized personnel as visiting nurses, physical and occupational therapists, nutritionists, social workers, etc. The challenge to health authorities lies in the development, coordination, and improvement of these community techniques, methods, and organizations which comprise a comprehensive health care program. A major related goal is that the physically disabled should have the opportunity for restoration even though correction of the disability may not return the person to economic productivity.

3. Mental Health

Nowhere in the health field is the need for rational planning and development of community services more evident than in the area of mental health. The past institutional arrangements for the care and treatment of the mentally ill often increased alienation of the emotionally ill by isolating them from the community and from their families.

The relative magnitude of the mental health problem of our nation has been fairly well delineated. It is estimated that mental illness effects 17 million Americans, fills every other hospital bed, and costs over \$3 billion annually. The role of community services in the mental health field is the subject of a major recommendation of the landmark report of the Joint Commission on Mental Illness and Health. The Commission recommends the development of State or regional systems of community mental health centers in communities of 50,000 as a "main line of defense in reducing the need of many persons with major mental illness for prolonged or repeated hospitalization." There is increasing agreement among authorities that huge isolated asylums are undesirable compared with facilities integrated into the framework of community health services.

4. Mental Retardation

In 1960 there were an estimated 5.4 million children and adults who were mentally retarded. Unless there are major advances in methods of prevention, there will be as many as one million more mentally retarded persons by 1970. This increase is predicated on anticipated general population growth, increased life span, and increased infant survival rates.

Although mental retardation results from a complex of causes-- many of which are incompletely understood--we nevertheless know that certain community conditions produce excessively high rates of mental retardation. These conditions include low economic status, inadequate maternal and child care, unsatisfactory stimulation in the home and neighborhood environments, and a lack of provision for the education of children with special needs and problems. Community services for the mentally retarded must be related broadly and specifically to these conditions that spawn retardation. They

must be related to better maternity care, to better programs of nutrition, to the reduction of prematurity, to comprehensive family services, to encouragement through day care centers and otherwise to stimulate the pre-school intellectual development of children. Diagnostic facilities and services must be available to ensure early identification and complete diagnosis of the retarded child so that he may receive the kind of treatment and training he needs.

5. Environmental Hazards

The impact of the socio-economic trends on environmental health problems and programs has been well documented. The growth of population, urbanization and the swift emergence of the chemical and atomic age have produced hazards of environmental contamination in our air, water, and food that pose a monumental challenge to the community and the nation. Considering what has happened in the recent past, changes in health programming to provide greater emphasis to environmental health hazards will be an important future development in the health field.

These are some of the problems that face our nation today. They affect the manpower requirements, the needs for facilities, the kinds of services, and the avenues of future investigation.

COMMUNITIES: PLANNING FOR HEALTH AND WELFARE SERVICES

Existing community services are, with few exceptions, inadequate in scope, variety, and quantity. For example, only 208 communities in the United States have homemaker services available, and agencies providing homemaker services are concentrated in less than half the States. Although visiting nurse services are more generally available, about 30 percent of the cities with populations of 25,000 or more are without such services. About half of all the counties in the United States do not have full-time public child welfare services available. More than half of the nation's counties fail to offer probation services for juveniles. Even the juvenile courts that do have probation services are inadequately staffed with probation officers, and only one-tenth of these juvenile probation officers have full specialized training.

The advancement of improved community planning is a responsibility shared by all three levels of government. Responsible community leaders should initiate and carry out vigorous action to solve social problems of highest priority in their own locality

Federal and State Responsibility

Cities and even States are typically unable to tap all the taxable resources of a State or region in proportion to the social welfare responsibilities they must assume, or in terms of the different kinds of wealth that the nation produces. Tax programs involving appropriate State and Federal participation need to be developed which tax resources equitably and distribute funds to meet the urgent social needs of cities.

The Federal role is one of leadership, stimulation, and selective assistance. This role may include helping States and communities to identify the needs involved in the changing socio-economic framework. The Federal government should sponsor research to develop basic knowledge on emerging community problems. It should stimulate and provide incentive for area-wide planning demanded by the growth problems mentioned above. One possible way of achieving this end is to condition the availability of grants for community facilities or programs on the requirement that they be fitted into an overall area-wide planning effort.

The Federal government must be concerned with the availability of the basic resources--the manpower and facilities that are required by the program growth envisioned in the next few decades--by supporting and stimulating training and education in areas of manpower shortage in the helping professions, and through a balanced program of construction grants to State and local governments.

The primary State responsibility should be to seek out new methods of planning and organization in helping the new suburban communities as well as the old central cities to cope with new and increased burdens which they cannot resolve themselves. The States can render technical assistance and guidance to communities on the problems in which they have special competence and resources which the individual community does not have.

The Role of the Community

In setting goals for community services for the future, it is evident that long range planning, at all levels, is needed in order to strengthen preventive services and to break the cycle of self-perpetuating dependency and poverty. Active participation of citizens in services and planning at the community level is essential. Without such participation, the community cannot fulfill one of its most important responsibilities--the assimilation and integration of dependent and disabled individuals and families into the community.

Local public welfare agencies, Social Security district offices, health departments, and other public agencies must be prepared to work closely with local planning bodies where they exist and help establish them where they do not, making known the problems as they see them in the operation of their own programs or of other social service programs in the community. Voluntary agencies are involved at all levels of planning for services; one of their most important functions is the encouragement of citizen participation, particularly at the community level.

Guides to the Development of Community Services

To meet the challenge of the future successfully, the following general principles are offered as guides to the development of community health, welfare, and related services:

1. There should be accessible to the people in the communities where they live a range of community services broad enough to enable individuals and families to cope constructively with their social, physical, emotional

and economic problems. Such services should be planned for in such a way that when they reach the individual they do so as an interrelated whole.

2. Services should be available without regard to the individual's race, religious affiliation, citizenship, residence, or income. The cost of such services may be borne by the individual to the extent of his ability to pay for them or by the public depending on the nature of the service and established public policy.

3. A high priority should be given in over-all planning to the health, social, and related services which will strengthen the ability of families and individuals to manage and plan for themselves, which will enable persons to continue to live in their own homes as long as possible, and which will enable those who have had to be cared for in other ways to return to family living where this is feasible.

4. Preventive services, those which reduce the incidence of problems requiring community action, should be given a high priority in planning.

5. Care outside the family setting should be available for persons for whom this is appropriate, such care to be provided in a manner which will safeguard the individual's opportunity for as satisfying and well-rounded life as is possible for him in the light of his particular circumstances.

6. Services should be provided by, or under the direction of, persons fully qualified by professional training to give them.

7. There should be a continuing program of evaluation and research to determine how well the services provided meet the needs of people, and to add to scientific knowledge about cause and effect, with a plan for utilizing such knowledge as it becomes available in planning programs of community services.

8. An organized planning and coordinating group is needed in every community with population of 25,000 or more, and should include broad citizen representation as well as representatives from agencies and organizations, both public and private, providing services.

It is clear that community programs will need to be expanded if the objective of services being generally available to people wherever they live is to be met. The local community, where the needs for community services are greatest, may have the least resources for meeting them. The State has a broader tax base than the community and must take its share of responsibility for financing and developing community services throughout the State. The Federal government, with the widest tax base and ability to spread the tax burden among the entire population, also has an obligation for appropriate participation to assure that these needs can be met.

The urgent need is for action beginning at the community level to develop more and better services to assure the maximization of each citizen's potential. The social, economic, and health conditions that call for community action are clear and incontrovertible. The contradiction implicit in the existence of culturally and economically deprived minorities in the midst of our increasing affluence must be faced and overcome. There should be citizen participation at all levels in planning and coordinating community services to meet the changing needs of our people.

PART II

CHANGING POPULATION AND CHANGING NEEDS

MARRIAGES, BIRTHS, AND POPULATION GROWTH

Anders Lunde, Carl Ortmeier, and Earl Huyck

A noticeable decline in the United States birth rate from a high point in 1957 (25.0) to a new low in 1962 (22.4) has stimulated consideration as to the effect this change will have upon the population structure of the United States, and in turn on the organization of the family, on programs concerned with children, on education, on matters pertaining to public health and welfare, and on social and economic life in general. Yet the present decline in the birth rate (live births per 1,000 population) does not necessarily mean that there will be fewer children born in future years. There is every reason to believe that there will be a continuing high level of births and possibly an increase in the actual number of births toward the close of the present decade and into the next. The outlook is for considerable growth of the United States population.

Growth of the Population

In the first half of the 20th Century, the population doubled, growing from 76.1 million in 1900 to 150.7 million in 1950. The largest numerical growth in the history of the United States took place between 1940 and 1960 when the population increased by 47.7 million persons, a number almost as large as the total population recorded by the census of 1880. The total population increased by 19.0 million persons in the 1940's and by an unprecedented 28.6 million persons in the 1950's.

Dr. Lunde and Dr. Ortmeier are in the Natality Statistics and Marriage and Divorce Statistics Branches, respectively, of the National Vital Statistics Division, National Center for Health Statistics, Public Health Service, U.S. Department of Health, Education, and Welfare. Dr. Huyck is a Program Analysis Officer in the Office of the Assistant Secretary (for Legislation).

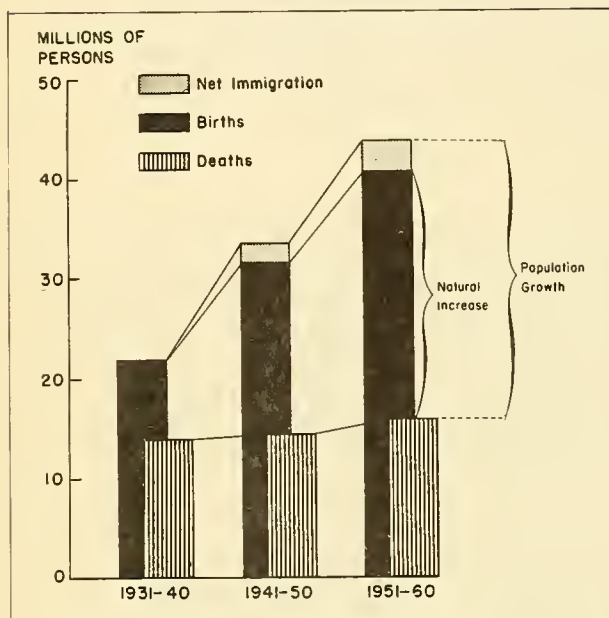
Based on: (1) Vital Statistics of the United States, Monthly Vital Statistics Reports, Vital Statistics--Special Reports, Volume 51, Number 1, Whelpton and Campbell, Fertility Tables for Birth Cohorts of American Women, and unpublished data; (2) U.S. Office of Education, Circular No. 692, K.A. Simon, Enrollment in Public and Nonpublic Elementary and Secondary Schools 1950-80; (3) U.S. Department of Commerce, Bureau of the Census, Series P-20, No. 108, Grabill and Parke, Marriage, Fertility and Childspacing: August 1959; Series P-25, No. 251, Interim Revised Projections of the Population of the United States by Age and Sex: 1975 and 1980; 1960 Census of the Population, United States Summary; and (4) U.S. Department of Labor, Bureau of Labor Statistics, Special Labor Force Report No. 24, Interim Revised Projections of U.S. Labor Force, 1965-75.

Health, Education, and Welfare Indicators, March 1963

Nor is the end in sight; it is estimated that between 30 and 36 million persons will be added to the total population by 1970, and another 37 to 45 million by 1980, making a total population of 246 to 260 million persons.

Births, deaths, and migration are the vital factors which determine the rate at which a population grows. The decline in mortality, extending into the 20th Century, accounted for considerable growth, but the death rate has leveled off in recent years. The decline in the death rate was fairly continuous from 1900 (17.2 deaths per thousand population) to 1953 (9.6), and has fluctuated near that level ever since.

GROWTH FACTORS 1931-60



The flow of immigrants which contributed greatly to growth in the 19th and early 20th centuries was curtailed through the means of the quota system in the 1920's. Despite recent increases in number, net immigration accounted for only about one-tenth of the growth between 1950 and 1960. Nor did the death rate during the decade decline markedly below the relatively low level already attained. Unless an unforeseen catastrophe creates an unusual rise in mortality, or there is a rapid increase in immigration from abroad--which seems unlikely--mortality and migration will not be leading factors in population growth during the 1960's and 1970's. The dynamic factor in population

growth in the United States is, and will continue to be, the number of births--births of native parentage.

Factors in Population Growth
(Thousands of persons)

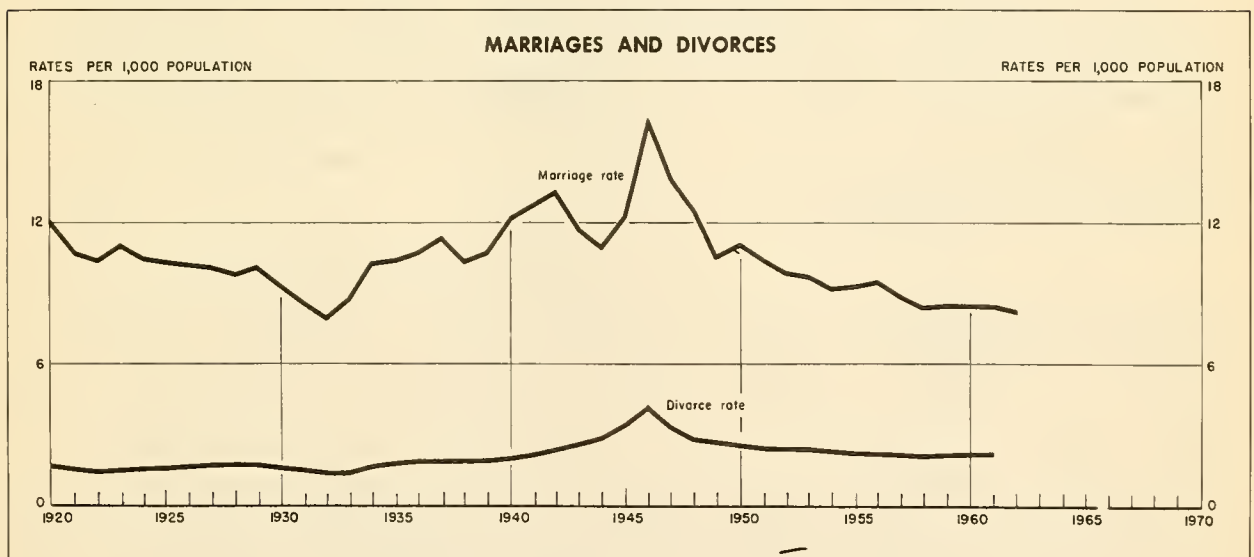
Decade	Net population growth	Births	Deaths	Natural increase	Estimated net civilian immigration
1931-40	7,953	21,852	13,849	8,003	-50
1941-50	19,134	31,425	14,237	17,188	1,946
1951-60	27,909	40,689	15,721	24,878	3,031

Marriages and Divorces

The conduct of peace and the waging of war, especially transitions from war to peace, have had considerable impact on marriage trends. Levels of employment and unemployment related to the Nation's economic activity have encouraged or discouraged the taking of marriage vows. Annual marriage totals during the severe economic depression of the 1930's reveal a sharp decline from 1930 to 1933, an equally rapid recovery in 1934, followed by a slower rate of increase through 1937, a sharp drop in 1938, and finally increases in 1939-42 during the period of industrial buildup for defense and war.

Large-scale mobilization of men in the marriageable ages has occurred under the serious threat of war as well as during war. Based on analysis of monthly marriage data for 90 major U.S. cities, the deseasonalized number of marriages increased by about 7 percent between March and April 1941 during the peacetime draft preceding United States entry into World War II, dropped off by over 4 percent between April and June 1944 when mobilization for the war was relatively complete, and increased 8 percent from October to November 1945 as the beginning of demobilization brought couples together and permitted them to enter into marriage; the average month-to-month change from 1941 through 1958 was only 1.1 percent.

As the pace of demobilization accelerated, the annual number of marriages nationally soared in 1946 to an unprecedented peak of nearly 2.3 million, more than twice as many as the approximately one million marriages annually during the early years (1931-33) of the depression, and about 50 percent greater than the number of marriages in the most recent years, 1960-62.



Following their 1946 peak, marriages declined sharply for three years (13 percent in 1947, 9 percent in 1948, and 13 percent in 1949) to 1,580,000, about the same as their 1960-62 levels. During the 1950's fluctuations were smaller--a 5.5 percent rise in 1950, with the onset of conflict in Korea, followed by a general decline (interrupted only by a leveling off in 1953) to a low of 1,490,000 in 1954, a year of economic recession. The level of marriages again rose through 1956, but then dropped to a post-World War II low of 1,451,000 in 1958 during another period of economic recession. Since 1958 there has been some increase.

By about 1965 or 1966, when the young people from the "Baby Boom" of 1946-47 reach the late teen ages, there should be a sharp increase in the number of marriages, and it may well be that marriages will again have passed the 2 million mark by 1970. Several factors underlie these marriage trends: The relationship between numbers of marriages and of adult unmarried females; trends in age at marriage; and relative proportions of first marriages and remarriages as related to the total number of marriages; and nondemographic factors.

The relationship between numbers of marriages and of adult unmarried females is indicated by the trend in the number of marriages per thousand unmarried females 15 years of age and over. In general, the number of marriages increases less rapidly than the marriage rate, but the age-sex distribution of the population is such that the marriage rate declines more rapidly than the number of marriages. The year-to-year changes in number of unmarried women 15 years of age and older are relatively less than corresponding changes in the number of marriages. Hence, any decline in marriages is associated with the postponement of some marriages. This "delay" and "catch-up" effect appears for the periods from 1931 through 1939, and from 1954 to the present.

The increase in births during and immediately after World War I (resulting in increases in marriageable women about 1940) was sufficient to increase the number of unmarried women almost as rapidly as the number of marriages during the early 1940's. However, from 1945 to 1952, the marriage rate increased less rapidly and declined more rapidly than the number of marriages, indicating that the number of unmarried women was declining--probably due to the unprecedented number of marriages, and because of the declining number of births in the later 1920's and accentuated in the early 1930's.

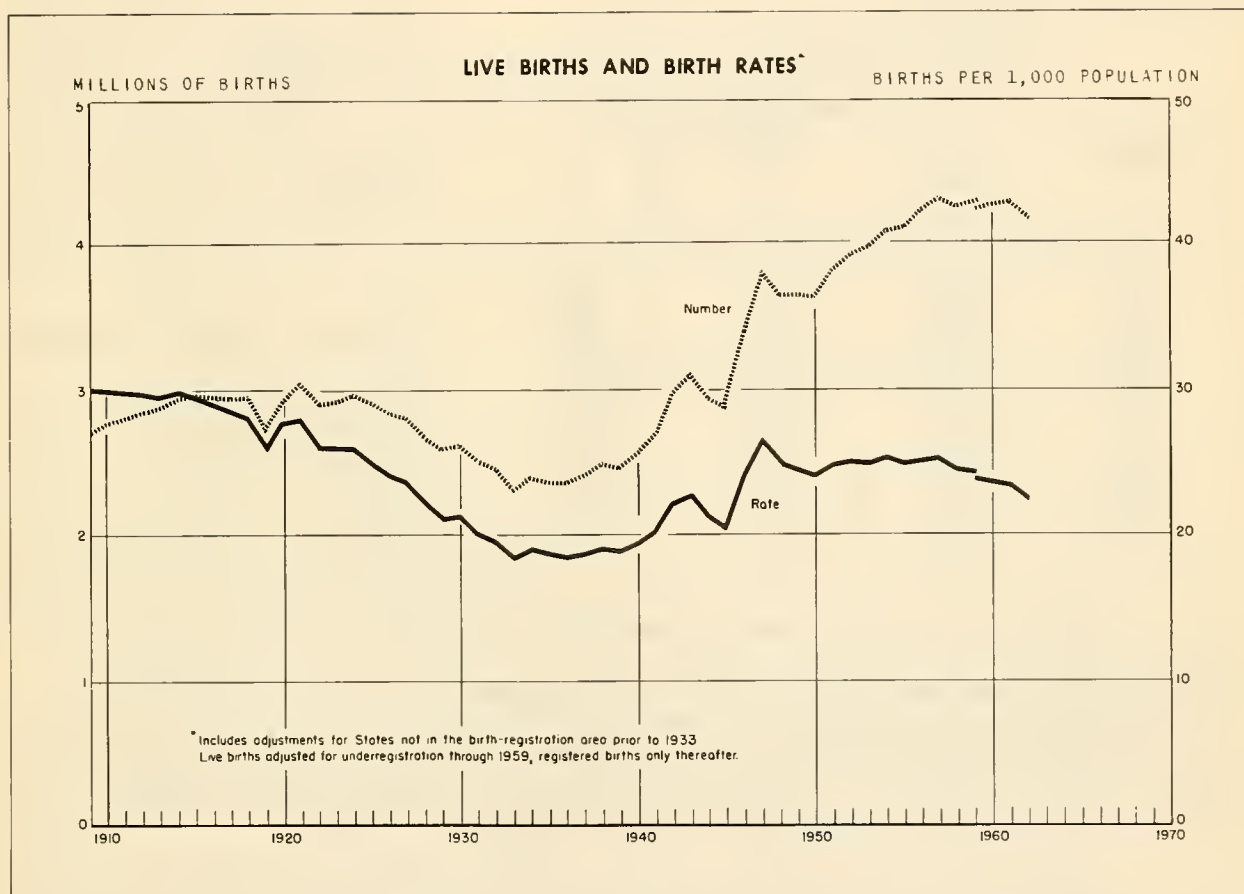
Trends in birth cohorts (groups born during the same years) of marriageable women and in factors resulting in sudden increases or declines in marriages will be reflected in variations in proportions of marriages and in age at marriage. However, percentages of brides and grooms of varying ages and percentages marrying for the first time and remarrying are quite uniform for the years for which data are available (since 1948). The data for 1951-52 show an unusually high proportion of brides and grooms in their early twenties and balancing deficiencies at ages 25 and older. These 1951-52 variations are probably attributable to mobilization of manpower during the Korean conflict. More dramatic

changes in numbers of marriages after the mid-1960's as the post-World War II "Baby Boom" children enter peak marriage ages may upset these uniformities, particularly as to age-at-marriage.

Divorce, the legal and final rupture of an existing family, doubled in number from less than 300,000 in 1941 to more than 600,000 in 1946. At present about 400,000 marriages are ending in divorce each year. The current divorce rate per thousand population, at about 2.2, is at the 1941 level; the rate in 1946 was 4.3. In terms of married females 15 years of age and older, the divorce rate was 17.9 per thousand in 1946 and has been about 9 per thousand in recent years.

Births Since 1945

Trends in births have followed trends in marriages but with less pronounced monthly and annual fluctuations.



Birth rates increased rapidly in the second half of the 1940's; the crude rate rose from an average of 20.2 in 1941-45 to 24.2 in 1946-50. Cohort fertility analysis has pointed up the significance of the "timing" of births. Births are either postponed or advanced during a woman's lifetime

as a result of changing economic conditions, war, and other related factors. In the economic depression of the 1930's, many women postponed births. There was a rise in births beginning in 1940 related to economic improvement which led to a peak of 3.1 million births in 1943. During 1939-45 first births were postponed by younger women while older women were having their first babies that had been postponed during the depression years.

After a slight decline from 1943 to 1945 while men were in service, the number of births jumped to 3.8 million births in 1947 (Table), the "Baby Boom" year, following a wave of marriages entered upon in 1945 and 1946. The boom resulted largely from the rise in the proportion of women who became mothers for the first time and continued into the following decade. Related to this was the fact that more married women were having a child instead of remaining childless permanently. As compared to 1940 when 26.5 percent of all ever married women aged 15-44 were childless, 22.8 percent of such women in 1950 and only 14.8 percent in 1959 were childless.

Total Live Births and Crude Birth Rates, 1945-1962

Year	Births (000's)	Rate	Year	Births (000's)	Rate
1945	2,735	19.5	1954	4,017	24.9
1946	3,289	23.3	1955	4,047	24.6
1947	3,700	25.8	1956	4,163	24.9
1948	3,535	24.2	1957	4,255	25.0
1949	3,560	23.9	1958	4,204	24.3
1950	3,554	23.6	1959	4,245	24.0
1951	3,751	24.5	1960	4,258	23.7
1952	3,847	24.7	1961	4,268	23.3
1953	3,902	24.6	1962(p)	4,167	22.4

Through 1951-60, the birth rate was maintained at an average of 24.5, and over 40.7 million babies were born, as compared to 31.4 million for the previous decade. The number of babies added to the United States population during the 1950's was greater than for any previous decade in the Nation's history. This growth continued through 1961, when there were 4.3 million births, but declined in 1962, when there were an estimated 100,000 fewer births than in the previous year. This decline in number will probably continue for two or three years.

The decline in the annual number of births is partly related to the age and sex structure of the population. In 1960, for example, there were over one million fewer women in the most fertile age group (20-29) than in 1950. These women represented a smaller proportion of the total childbearing population (31 percent in 1960 as compared to 36 percent in 1950). If women in the 30-39 age groups had their families earlier, they would not be expected to produce as many additional children as in an

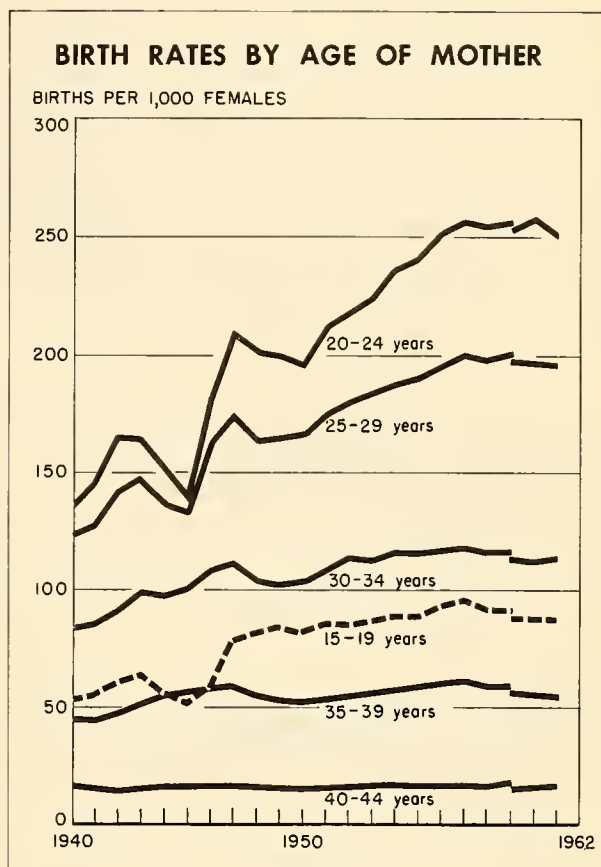
earlier generation; they and their younger sisters in the 20-29 age group may have borrowed from the future. Not until the sizeable groups of potential mothers now under 20 move into the main childbearing periods will there be an increase in the number of births. There will be about 5 million more potential mothers in 1970 than there were in 1960, and 36 percent of them will be in their most productive twenties.

The crude birth rate will probably continue to decline even after the total number of births rises. Since this rate is simply the number of births per thousand population and the base number will increase as a result of population growth, the crude rate will drop if the present high level of births is maintained or even if the number of births increases somewhat. For example, if the number of births in 1970 increases to 4.5 million and the population rises to 215 million, the crude rate will be less than it is today, (20.9 as compared to 22.4 in 1962).

Changes in Family Formation

The changing pattern of family formation in recent years has involved several aspects including the time span during married life at which a woman will bear her children, the increase in average family size but the decline of the very large family.

Since World War II there has developed a tendency to marry earlier and have the first baby sooner after marriage. The median age of mothers fell from 23.0 years at the birth of the first child in 1940, to 22.7 years in 1950, and 21.4 years in 1961. The second and third child also appeared earlier. This advance of births brought about a concentration of family formation at younger ages. While women born in the period 1886-95 had about one-half of their babies before age 28, the women of 1926-30 probably had two-thirds of their babies before that age. The present trend is toward a continuation of this early family formation.

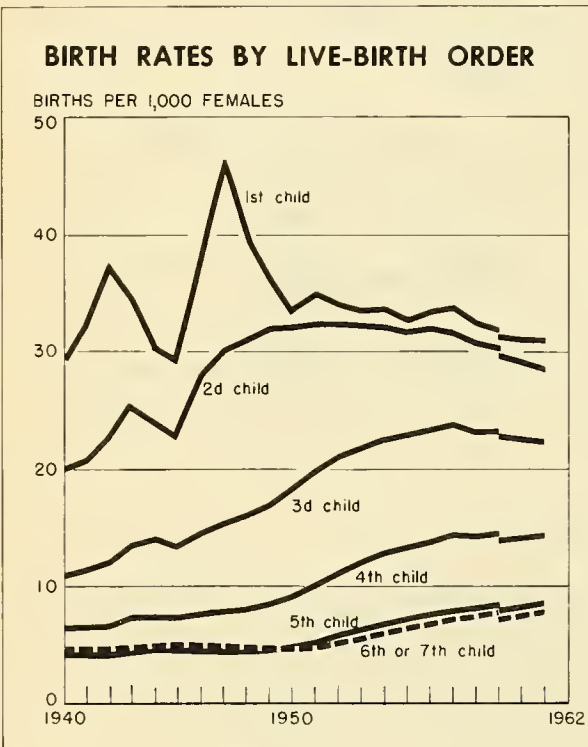


There has been an increase in the average size of the American family in terms of cumulative fertility. In 1940 and 1950 the number of children born per thousand women ever married was about 1,900; in 1959, this number had increased to 2,300. Cohort fertility analysis shows that the number of children produced by American women declined steadily from the cohorts of 1876-80 to those of 1907-11. The cohort of 1880 (which reached age 50 in 1930) had produced 3.5 children per woman while the cohort of 1910 (which reached age 50 in 1960) had produced 2.3 children per woman. Later cohorts, which have not yet completed their childbearing years, have already exceeded the latter figure. For example, the cohorts of 1917 and 1918 had produced 2.4 children per woman by age 40; that of 1919, 2.5 children by age 39; and that of 1920, had borne 2.6 children by age 38. The average number of children per woman is expected to continue to increase through the next decade, but in terms of total women such an increase will probably be less than one child per woman. An increasing proportion of couples are having moderate sized families of two to four children instead of the somewhat smaller families of the 1930's and early 1940's.

The large family of five or more children has been on the decline. The cohorts of 1886-90 by ages 45-49 produced 877 fifth or higher order births per thousand women while the cohorts of 1906-10 produced 391 such births, or a drop of 55 percent. It is anticipated that the proportion of families having five or more children will continue to decline through the next decade.

Major Demographic Developments in Process

As a result of the fertility pattern established since World War II, the stage is already set for three major demographic developments which will have ascertainable effects in the population structure to the end of the century.



The first of these developments we are now experiencing: the impact upon society of the sheer number of babies born since World War II. The large contingent of babies born in 1947 will attain their 18th birthday during 1965 and the sizeable groups of the years following 1947 will

enter society at different age levels in their turn, for years to come. For example, the educational requirements already imposed by this group on our primary and secondary school systems will soon become the pressures on the colleges and on all phases of our social and economic life during this and the next decade.

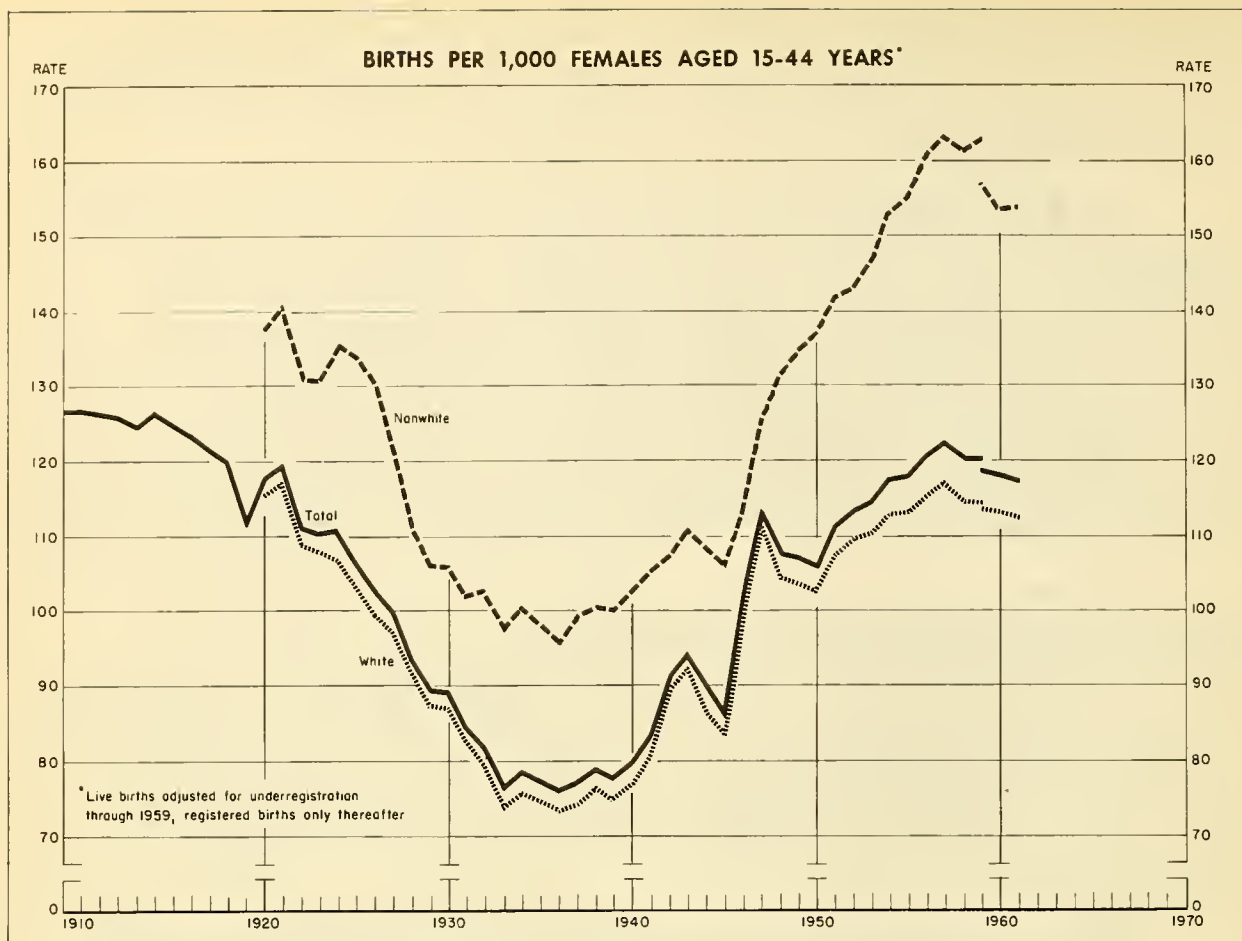
The second development will result from the fact that most of the postwar babies will reach maturity and eventually marry. The number of marriages which will result by 1970 (if 1960 marriage rates for women continue during the 1960's) has been estimated at about 2.1 million. The fastest rate of increase should appear in 1965 and 1966 when the still-living girl babies of 1946 and 1947 reach the peak marriage ages of 18-20. Since teen-age brides characteristically marry grooms two to four years their seniors, while brides of 21 or older most often marry grooms the same age, some of the young women who were born during the postwar "Baby Boom" may delay marriage for a few years, thus delaying somewhat the years of sharpest increase in the level of marriages.

Increased numbers of persons entering marriage will generate another increase in the number of children born. If an increase in the number of marriages may be anticipated during the latter half of the present decade and continuing into the next, we may also expect an increase in births, especially after 1970. The meaningful projection of births is complicated by many factors, not the least of which is the increasing importance of family planning. Yet even should more couples limit the size of their families in the future, there will be an impressive number of children born in the United States due to an increase in the potential number of parents.

These three events are interrelated; a cycle has been established wherein the increase in births after World War II results in an increase in marriages and a new wave of births.

Fertility Differentials

The long standing differences between the fertility rates of whites and nonwhites have been particularly in evidence since World War II. The nonwhite population increased from 13.5 million in 1940 to 20.5 million in 1960, or 52.3 percent as compared to 34.4 percent for the whites in the same period. This was largely the result of the higher fertility of nonwhite women as well as an improvement in life expectancy. In contrast to the white crude birth rate which reached a peak on 1947, then declined and leveled off until 1957, the nonwhite rate continued to rise until 1956, when it was 33.9 per thousand population. In 1961, a record number of 667,000 nonwhite births was recorded at the rate of 31.6 births per thousand population. In that year the fertility rate per thousand white women 15-44 was 112.3 and for nonwhite women was 153.8 (Chart).



This fertility differential will continue and affect an increase in the proportion of nonwhites in the community. Negroes constituted 9.8 percent of the United States population in 1940; 10.0 percent in 1950, and 10.6 percent in 1960. By 1970, should the proportion increase to 11 or 12 percent, there will be some 25 million Negroes in the United States. A considerable increase of nonwhite youth in the 1960's and well into the 1970's will exert proportionally greater pressures than the whites in the areas of education and employment.

In general, other fertility differentials are smaller than they were a few decades ago. Because of the greater increase in the fertility rate in the urban areas, the urban-rural differences are not so great as they were in 1950. The differences between the geographic regions of the United States are diminishing. Differences in fertility by socio-economic status associated with such factors as education, income, place of residence and occupation likewise have been reduced.

The decline in fertility differentials signifies that there has been a trend toward greater conformity in fertility desires and performance throughout the country. Contributing to this decline have been an increasing movement toward the cities, an extension of education, a marked improvement in the general standard of living of the population, and an increase in the extent and effectiveness of family planning.

Births and the Population Structure

The dynamic factor of increased births will dramatically alter the population structure with far-flung consequences in the social and economic life of the United States. The population pyramids of 1940 and 1960 show the changes in the age and sex composition of the population in five-year groups wrought in that twenty year period (Chart and Table). The 1960 pyramid is shaped like a dumbbell, broad at the younger and older ages and constricted in the young adult ages. The major difference between the pyramids lies in the base, which changes from a constrictive form in 1940 to an expansive form in 1960. This reflects past growth and future gain through fertility. The children under 15 years of age represented 31 percent of the entire population of 1960, compared to 25 percent in 1940. The increase in the population 35 years and over is apparent. Persons aged 65 and over represented 7 percent of the population in 1940 and 9 percent of the population in 1960.

The illustration shows the possible structure of the population of 1980 superimposed upon the structure of 1960. The enlarged base indicates a strong future growth potential, with a considerable enlargement of all groups up to 40 years of age. The somewhat constricted 40-49 group represents contingents born during the low birth periods of the 1930's. The age group 50-54 is substantially larger, representing the greater number of births in pre-depression years. The enlarged group 75 and over represents increased life expectancy.

Anticipated fertility increases will create a younger population in the United States. The median age of the population increased during every decade from an estimated 16.7 years in 1820 to a peak of 30.2 years in 1950. In 1960 the median age dropped to 29.5; the current decline will continue in this decade and into the next.

Changes in Age Structure of the Younger Population

The population changes that have made their impact during the two past decades and which will affect the future may be understood in terms of the alterations in the numbers of persons of varying ages under 20.

Children under 5 years of age doubled in number between 1940 and 1960 from 10.5 million to 20.3 million (from 8 percent to 11.3 percent of the total population), and should grow even larger into the next decade, possibly to 25 million by 1970.

Children 5 to 14 years totaled 22.4 million in 1940 and 35.5 million in 1960. They contributed to the pressure on the elementary schools and are now entering the secondary schools. This age group by 1970 may total some 40 million and after 1975 will increase substantially with the entrance of children born in the late 1960's.

Children 15-19 years, numbering 10.6 million in 1950 and 13.2 million in 1960, will increase in number until the middle of the next decade at least. The early "Baby Boom" children are entering the age group now, and the high birth years of the recent past will tend to swell it as time goes on.

As a whole, persons under 20 years of age numbered 45.3 million in 1940; 51.1 million in 1950; and 69.0 million in 1960. According to Census Bureau projections, this number will increase to about 87 million in 1970 and to 109 million in 1980. In the next ten to twenty years, therefore, there will be greater demands placed upon our educational facilities, and we may expect an increase in those problems which deal with dependency, child care, and youth. The mere bulk of the projected group will portend an increase in the number of younger persons involved in delinquency and crime, and other marginal anti-social activities. There will likely be an increase in the number of illegitimate births.

Implications for Education

From kindergarten through college, the schools may expect an invasion from the younger populations which have been building up since World War II. Between 1949-1950 and 1959-1960, total school enrollments in kindergarten-grade 12 increased from 28.6 million to 42.4 million, or about 48 percent. The average enrollment growth in kindergarten-grade 12 was 1.4 million children per year. Total school enrollment growth is expected to range between 10 and 15 million in this present decade, and to be between 12 and 17 million in the 1970's.

There were 22.2 million children enrolled through 8th grade in 1945-50 and 32.8 million in 1959-60. Projections show this group increasing to 39 million in 1969-70 and to about 49 million in 1979-80.

The secondary school enrollments did not grow as fast in the last decade but their growth is accelerating as the large birth contingents come of age. Some 6.4 million children were enrolled in secondary schools in 1949-50; 7.7 million in 1955-56, and 11.5 million in the fall of 1962. Medium estimates show that this group will increase to 14 million by the end of this decade and to around 17 million in 1979-80.

At the end of World War II, about 80 percent of all persons 14-17 years of age were enrolled in school; by 1962, 92 percent were enrolled. This emphasizes a rather steady increase in the proportion of persons of this age group who enroll in school. Rising economic demands for trained manpower coupled with individual aspirations are augmenting the population factor, and will continue to do so in the future.

The college age group, 18-21 years of age, will grow relatively rapidly in this decade. Rising college enrollments will continue to increase--and sharply after 1965. Population growth is perhaps the most significant factor, but the growing interest in college study is also involved. College enrollments were estimated at 2.2 million in 1950 and 4.2 million in 1962. Projections indicate that some 8.5 million students may be enrolled in colleges and universities in the academic year 1972-73.

There has been an increase in the number of persons enrolled in federally-aided vocational courses of all types, from 2.8 million in 1948 to 4 million in 1962. The great mass of young persons who will not enter college and who may not find immediate employment after high school may turn to vocational schools in larger numbers. We may therefore anticipate that this type of school may be under considerable pressure beginning the last half of this decade. Increasing interest in adult continuing education--of training and retraining--may also be anticipated.

The Productive Age Group: Implications for Employment

Persons between the working ages of 20 and 65 increased from 77.3 million in 1940, to 87.3 million in 1950 and to 93.8 million in 1960. Because of the entrance in the near future of persons born after World War II, persons of this age group will grow to about 107 million in 1970 and possibly to 127 million in 1980.

Despite the postwar increase in numbers, the proportion of the population in the group declined from a peak of 57.8 percent in 1945 to 52.3 percent in 1960. The decline will continue through this decade and into the next as a result of the shift in age distribution, from an older to a younger population seen as a whole.

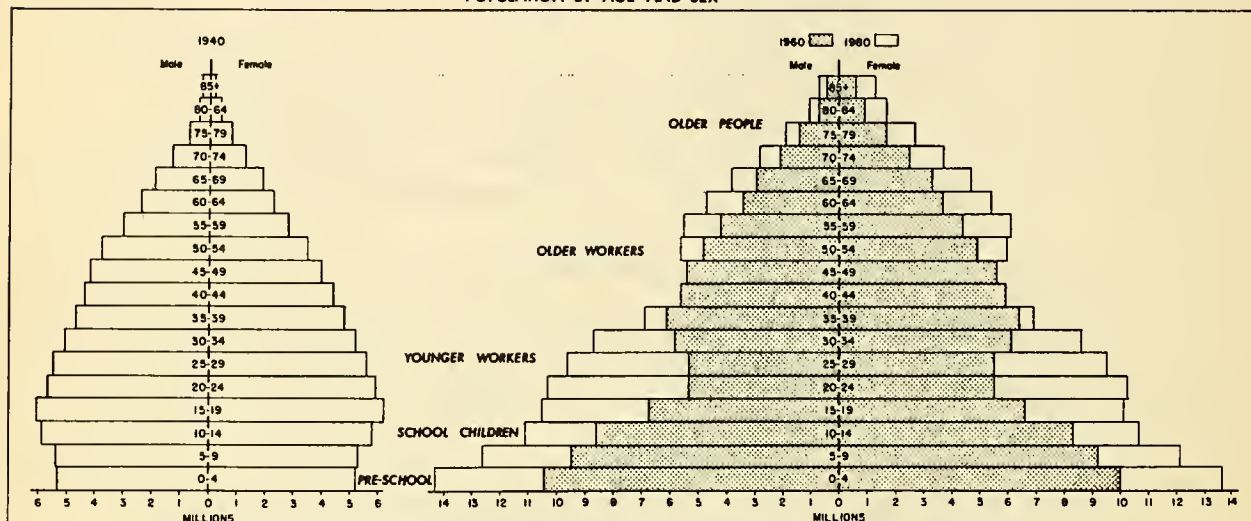
The labor force has nonetheless grown from 53 million persons in 1940 to 72 million in 1962. Labor force projections indicate a further increase to 86 million in 1970 and 93 million in 1975. The most dramatic increase will be in younger workers under 25 years of age. They will be entering the labor force in a period of accelerated technology applied to clerical as well as to production processes.

A more significant role in the labor force will be played by women as a result of two factors--a larger number of young women as well as men will be seeking work in the late 1960's, and family completion at earlier ages will release more women from family duties. The full effect of the latter phenomenon will probably not be felt until the late 1970's. A bi-modal pattern has already been established of work, family formation, and return to work to pay for rising levels of living and to put children through college. Between 1950 and 1960, more women than men were added to the work force, 4.8 million women as compared to 3.5 million men. The number of women in the labor force rose from 18.7 million in 1950 to 23.5 million in 1962 and may reach about 30 million in 1970.

The Older Population

Persons 65 and over numbered 12.3 million in 1950; 16.6 million in 1960, and are expected to increase to about 20 million in 1970. The position of this group has been discussed in Health, Education and Welfare Indicators (November 1962, January and March 1963) in three articles: "The Older Population," "New Horizons for the Aged," and "Medical Care for the Aged under Public Assistance."

POPULATION BY AGE AND SEX



Population by Age and Sex (in millions)

Age Group	1940				1960				1980*			
	Males		Females		Males		Females		Males		Females	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	66.3	100.0	65.8	100.0	88.3	100.0	91.0	100.0	128.1	100.0	131.4	100.0
0-4	5.4	8.1	5.2	7.9	10.3	11.7	10.0	11.0	16.6	13.0	15.9	12.1
5-9	5.4	8.2	5.3	8.0	9.5	10.8	9.2	10.1	14.7	11.5	14.1	10.7
10-14	6.0	9.0	5.8	8.8	8.5	9.7	8.2	9.1	12.9	10.1	12.3	9.4
15-19	6.2	9.4	6.2	9.4	6.6	7.5	6.6	7.2	11.4	8.9	10.9	8.3
20-24	5.7	8.6	5.9	9.0	5.3	6.0	5.5	6.1	10.3	8.1	10.2	7.7
25-29	5.5	8.3	5.6	8.6	5.3	6.0	5.5	6.1	9.6	7.5	9.5	7.2
30-34	5.1	7.7	5.2	7.9	5.8	6.6	6.1	6.7	8.7	6.8	8.6	6.6
35-39	4.8	7.2	4.8	7.3	6.1	6.9	6.4	7.0	6.9	5.4	6.9	5.3
40-44	4.4	6.7	4.4	6.7	5.7	6.4	5.9	6.5	5.6	4.4	5.8	4.4
45-49	4.2	6.4	4.1	6.2	5.4	6.1	5.5	6.1	5.4	4.2	5.6	4.3
50-54	3.8	5.7	3.5	5.3	4.7	5.4	4.9	5.4	5.6	4.4	6.0	4.5
55-59	3.0	4.6	2.8	4.3	4.1	4.7	4.3	4.7	5.5	4.3	6.1	4.6
60-64	2.4	3.6	2.3	3.5	3.4	3.9	3.7	4.1	4.7	3.6	5.4	4.1
65-69	1.9	2.9	1.9	2.9	2.9	3.3	3.3	3.7	3.8	3.0	4.7	3.6
70-74	1.3	1.9	1.3	2.0	2.2	2.5	2.6	2.8	2.8	2.2	3.7	2.8
75+	1.2	1.9	1.4	2.1	2.4	2.7	3.2	3.5	3.7	2.9	5.7	4.3

* Source: U. S. Department of Commerce, Bureau of the Census; Current Population Reports, Population Estimates, Series P-25, No. 251, "Interim Revised Projections. . .," July 1962. Projection Series II assumes that fertility will continue at the 1955-57 level (which remained about the same through 1958-60) throughout the projection period to 1980.

INVESTMENT IN HUMAN RESOURCES

I. Economic Report of the President

On January 20, 1962, the President presented his Economic Report to the Congress, as required under the Employment Act of 1946. With his Report the President transmitted the Annual Report of the Council of Economic Advisers. A portion of the Council's Report is devoted to "Investment in Human Resources" and to the relationship of expenditures on health and education to economic growth.

The following are extracts from the Council's Report:

Increased production is not an end in itself but only a means of providing increased real income for all to share.... High levels of education and health, equality of opportunity--these are among the valid measures of a society's performance. They are desirable in their own right. In addition, they have an economic dimension. They are among the foundations of growth as well as among its benefits.

Americans have long spoken of foregoing consumption today in order to invest in their children's education and thus in a better tomorrow. For an economy, just as for an individual, the use of the word invest in this connection is clearly justified, since it is precisely the sacrifice of consumption in the present to make possible a more abundant future that constitutes the common characteristic of all forms of investment. That devoting resources to education and health is, in part, an act of investment in human capital explains why programs in the area of education and health are economic growth programs....

Failure to pursue vigorous educational and health policies and programs leads to smaller increases in output in the long run; it is also associated with higher expenditures in the short run. If we fail to invest sufficiently in medical research, we lose not only what stricken individuals might have produced had they been well, but also the use of the resources and funds currently devoted to their care. Failure to invest sufficiently in education means that we will lose the additional output that would be possible with a better educated labor force; it may also mean the perpetuation of social problems necessitating public expenditures....

Education

Estimates made by private scholars suggest that about one-half of the growth in output in the United States in the last 50 years has resulted from factors other than increases in physical capital and man-hours worked. Education is one of the "other factors." Even without allowance for the impact of education on invention and innovation, its contribution appears to account for between one-fourth and one-half of that part of the increase of output between 1929 and 1956 not accounted for by the increased inputs of capital and labor....

Health, Education, and Welfare Indicators, March 1962
Revised 1963

Though significant progress has been made, substantial opportunities and needs for investment in education still exist. There is a pressing need to improve curricula and teaching methods, make education more readily available to students of merit by reduction of financial barriers, expand facilities and staff to meet rising enrollments, improve the quality and productivity of our teaching staffs and increase their salaries, and narrow the gap in opportunities available to students in different parts of our country. These problems must be met--and met quickly--at all levels of government and at all levels of education if our standards of education are to keep abreast of our needs....

Enrollments in elementary and secondary schools rose from 28.2 million pupils in 1950 to 46.7 million in 1963. Enrollment in 1970 is expected to be 53.2 million. In 1950, 2.3 million students were enrolled in institutions of higher education, and by 1962 the figure had risen to 4.6 million. The projected 1970 enrollment is 7.0 million. Rising enrollments have necessitated substantial expansion of personnel and facilities. Further expansion is required if quality is not to deteriorate.

Our educational system thus confronts unprecedented challenges. To provide for additional students, replace obsolete structures, and modernize usable buildings, institutions of higher education should invest an average of \$2.3 billion annually. Expenditures currently fall short of this by \$1 billion. Needs at the below-college level must also be met, lest the foundations of the educational system be eroded. The price of failure will be the irrevocable loss of valuable talent.

However urgent the need for additional facilities and for the rehabilitation and replacement of existing facilities, the personnel problem is especially acute, because of the time required to train teachers. In the fall of 1962 about 83,000 full-time teachers in public elementary and secondary schools--some 5.5 percent of the total teaching staff--failed to meet full State certification standards. Demand for new teachers and for replacement of those leaving the profession will be very high. It can be met only by the training of new teachers accompanied by programs to increase the productivity and quality of experienced teachers. Teachers' salaries at all levels must continue their recent rise if good teachers are to be attracted into and retained in the profession of educating the Nation's youth....

Health

U.S. economic growth in the twentieth century has been associated with better health of the population as a whole as well as an increase in per capita expenditures on health and medical care....

At the same time that economic growth has contributed to an improvement in the health of our people, better health has contributed to economic growth. Better health makes possible an increase in the size of the labor force and in the effectiveness of effort on the job.

Further improvements in health would yield significant economic, as well as human, benefits. On an average day in 1962, 1.3 million employed persons--2 percent of civilian employment--were absent from work because of illness or accident. The days of work lost because of illness far exceeded the days of work lost because of industrial disputes; in fiscal year 1962 "currently employed" persons lost a total of 394 million days from work as a result of illness or injury, while the loss from industrial disputes in 1962 totaled 19 million days.

The costs of ill health have traditionally been calculated as the money spent for the prevention and treatment of accident and disease. The waste of human resources and the consequent loss of production is an important additional cost about which not enough is known. Where facts are available, as in the related area of vocational rehabilitation, the relationship between costs and benefits is impressive. In 1962, at an average cost of \$1,000 per rehabilitant under Federal-State programs, mean wages of rehabilitated persons were raised from \$8.70 a week at acceptance to \$41.20 at closure, a difference of \$32.50 a week after rehabilitation.

Public support for medical research, the most basic of investments in better health, has been growing. In fiscal year 1963 the Federal Government will provide about two-thirds of the \$1.5 billion in national expenditures for medical and health-related research. Further expansion of research activities, where funds can be wisely spent and where qualified research personnel exist, is desirable both for humanitarian and economic reasons. Much of the necessary research is carried on by doctors of medicine. More rapid expansion of the number of physicians is required to insure that patient care needs, teaching needs, and research needs can all be met. This will be true even if needed improvements are made in the organization and financing of medical care.

Increased demands for medical services, stemming in part from new discoveries and in part from growth in population and changes in age and income structure, already mean unfilled internships and residencies in hospitals. The full medical needs of the country are not being met in many fields, including public health and preventive medicine....

Eliminating Racial Discrimination

Racial discrimination....inflicts immeasurable human and social costs on a large number of our citizens. In addition...it inflicts an economic loss on the country.

Discriminatory practices in education, training, employment and union membership impede the development and utilization of human resources. They reduce the efficiency and slow the growth of the economy, at the same time that they alter--and alter inequitably--the distribution of the fruits of economic progress.

Although significant reductions in discriminatory barriers have been accomplished in recent years, important problems remain. Many nonwhite families are trapped in a vicious circle: Job discrimination and lack of

education limit their employment opportunities and result in low and unstable incomes; low incomes, combined with direct discriminations, reduce attainable levels of health and skill and thus limit occupational choice and income in the future; limited job opportunities result in limited availability of vocational education and apprenticeship training....

II. Economic Effects of Programs Administered by the Department of Health, Education, and Welfare 1/

The Department of Health, Education, and Welfare administers some 112 programs that have as their aim the development and improvement of the well-being of the American people. And, because of the importance of human resources to national strength and national development, the programs of the Department help to strengthen the economy in several ways. These programs:

1. Prevent or reduce illness, disability, and premature death. These programs serve to extend the productive years of life and to decrease time lost from work and school because of sickness or injury. The community health services, maternal and child health, crippled children's, and the accident prevention programs are in this category.

2. Increase our knowledge of the causes of illness, of mental retardation, of the learning process, and of the causes of delinquency and dependency. These are the research programs of the National Institutes of Health, the Office of Education, Office of Vocational Rehabilitation, and Social Security Administration, that will pay large dividends in years to come, as they have in the past, in lower death rates, in more effective methods of dealing with sickness and disability, in higher quality of education, and in a reduction in dependency.

3. Extend the availability of health services and the facilities, equipment, and supplies needed for medical care. Medical care payments under the public assistance program, the chronic disease programs, the Hill-Burton medical facilities and construction program, and the new community facilities program enacted last year, are in this category.

4. Promote the rehabilitation to productive living of individuals who because of injury, illness, congenital deficiency, or other defects are in need of restorative treatment. These programs include vocational rehabilitation and those that seek to help the drug addict, the alcoholic, and delinquent, and the many others who, because of physical, mental, or emotional problems, are unable to contribute constructively to society.

5. Contribute to the conservation and development of natural resources and to the safety of the environment. These are the programs directed to the problems of the pollution of water and air and the control of radiological hazards to health.

1/ Based on the testimony of the Secretary of Health, Education, and Welfare before the Joint Economic Committee of Congress, January 31, 1962.

6. Protect the consumer by insuring a safe supply of foods, drugs, and cosmetics. These programs are administered by the Food and Drug Administration and the Public Health Service.

7. Contribute to the size, quality, mobility, and productivity of the labor force. In general, these same programs promote opportunity, enhance the earning power of individuals, and add to the income stream of the Nation. They include such Federal aid to education programs as the National Defense Education Act, vocational education, and training programs to increase the supply of research workers, nurses, and other health, education, and welfare professions.

8. Extend the quality and availability of educational services, facilities, equipment, and supplies. These programs include grants for teacher training; for guidance, counseling, and testing; for the strengthening of science, mathematics, and modern foreign language instruction; and for specified educational institutions, such as Howard University and the land-grant colleges.

9. Provide income payments to retired, disabled, and dependent persons. The old-age, survivors, and disability insurance program now covers almost 90 percent of all paid employment in the United States. It provides benefits to retired workers and their dependents, to permanently and totally disabled workers and their dependents, and to surviving dependents.

10. Provide assistance to needy persons. The Federal Government shares in the cost of assistance of four categories of needy persons: the aged, the permanently and totally disabled, the blind, and children in need because of the death, desertion, absence, or unemployment of the parent.

From **the** many programs that fall under these headings two--consumer protection and vocational rehabilitation--might be singled out as illustrative of the economic impact of DHEW programs.

Economic Effects of Consumer Protection

The Food and Drug Administration's principal consumer protection program is the enforcement of six Federal laws designed to assure that foods are safe, pure, and wholesome; that drugs are safe and effective; and that cosmetics and therapeutic devices are safe; and that all of these products are honestly labeled and that hazardous household products bear sufficiently informative labeling to permit their safe use in the home....

These activities have significant economic effects:

1. Without a strong enforcement program it would be easier to market products that were slightly under the weight or volume declared. Consumers spent over \$86 billion for food in 1962. If shortages in weight and volume averaged only 2- $\frac{1}{2}$ percent (less than $\frac{1}{2}$ ounce per pound or pint) it would cost American consumers nearly \$2.2 billion a year.

2. Without a strong enforcement program it would be easier to market foods that are adulterated with less expensive, less nutritious, or with actually injurious ingredients. The adverse effect of many of these practices on the public health would be great. If such adulteration amounted to but 2- $\frac{1}{2}$ percent of the value of the food dollar, another \$2.2 billion would be lost to the consumer each year.

3. An active FDA sanitation program has contributed substantially to the decrease in the quantity of foods which are destroyed by insects and rodents each year.

4. The establishment of food standards has contributed to the quality of food. These standards in turn have helped the general health of the Nation, such as by contributing to the reduction or elimination of certain diseases caused by dietary deficiencies.

5. Strong FDA programs have fostered enlightened food sanitation and carefully controlled food manufacturing practices that have the effect of lowering the annual number of cases of food poisoning in this country.

Such safeguards and accomplishments have significantly bolstered public confidence in our food supply. On the whole, the American consumer trusts the food industry and believes that reliable manufacturers are providing good, wholesome products. This public confidence in our foods has several additional economic effects:

1. Though American consumers waste an estimated \$500 million annually on nutritional quackery, the figure would be much higher if confidence in the food supply were lacking.

2. Consumer confidence has led to the widespread acceptance and use of prepared foods and has materially increased the rate at which completely new food industries--such as the frozen food industry--have grown.

3. Widespread use of prepared foods has at least made easier an ever-increasing participation of women in the labor force. Over 24 million women (55 percent of whom are married) now represent approximately 34 percent of the civilian labor force.

4. More adequate diets, fostered in part by general confidence in the food supply and ready availability of a plentiful and varied supply of good food, have contributed to a national health level never before achieved. A healthy population means less man-hours lost because of illness, injury, or death.

Other economic effects can be attributed to enforcement of Federal laws and regulations relating to drugs. About \$5.1 billion annually is spent by consumers for drugs.

The Food, Drug, and Cosmetic Act was strengthened by the Drug Amendments of 1962, which require drug manufacturers to prove that new drugs are effective as well as safe before they may be marketed commercially. The amendments

also establish new safeguards for drug research, manufacture, and distribution, and broaden the factory inspection authority of the Food and Drug Administration.

It would be difficult to estimate what portion of the improved medical picture should be attributed to the activities of the Food and Drug Administration. But there is no doubt that the speed-up in medical research produced earlier marketing of such miracle drugs as anti-infective agents, tranquilizers, anti-hypertension agents, and anti-histamines. These drugs and others have been a major factor in extending productive lifetime, reducing the time lost from work through disease, and improving the efficiency of large segments of the population, with great economic gain to the country as a whole....

Other consumer protection activities, such as the removal of dangerous or ineffective drugs and devices from the market, drug warnings to insure safer employment of drugs, and the advice given to drug manufacturers through inspection and other educational activities, produce other economic benefits....

Vocational Rehabilitation and the Economy

Vocational rehabilitation is an outstanding example of investment in human resources that has a direct economic impact. The Vocational Rehabilitation Administration of the Department of Health, Education, and Welfare administers the grant-in-aid program that assists the States in rehabilitating physically and mentally disabled people so that as many of them as possible may earn their own living and may make their own contribution to the economic welfare of this country.

There are in the United States today more than two million disabled people who could through vocational rehabilitation services be able to work either in the competitive labor market, in sheltered employment, or in their own homes. Of the persons who become disabled each year, over 270,000 could benefit from vocational rehabilitation services.

The State Vocational Rehabilitation Agencies last year served more than 345,600 disabled people and rehabilitated 102,400 into employment. This year's goal is 110,400 rehabilitations. The following are illustrations of the economic effects of the vocational rehabilitation program:

1. Reduction in Unemployment and Increased Earnings. In fiscal year 1962, over 74,400 of the 102,400 disabled who were rehabilitated and placed in employment were not employed when their rehabilitation began. The remaining 28,000 were under-employed or employed in unsuitable occupations. Total earnings of these people in the year before rehabilitation was \$44 million. It is estimated that the entire group will earn in their first full year of employment \$211 million, a gain of \$167 million.

2. Publicly Supported Cases Returned to Economic Productivity. About 17,800 disabled people who were rehabilitated in 1962 were being supported by public funds at the time they were accepted for rehabilitation or while receiving rehabilitation services--13,600 were receiving public assistance and 4,200 were in tax-supported institutions, such as mental hospitals.

Payments to the 13,600 public assistance recipients cost taxpayers \$15.3 million a year before rehabilitation services were provided. After rehabilitation, only 5,370 clients were receiving public assistance of \$5.1 million per year--a reduction of over 60 percent in clients and a savings of over \$10 million annually in public assistance expenditures.

3. Increase in the Size of the Labor Force. The 102,400 disabled people who were rehabilitated in 1962 alone will contribute 150 million work hours annually. Approximately 8,000 of these rehabilitants are in professional, semi-professional, and managerial occupations. Over 12,000 are in skilled work; 7,500 in agriculture; 16,400 in clerical and sales; 20,600 in services; and the remaining are in semi-skilled and unskilled work.

4. Payment of Taxes by Rehabilitants. It is estimated that the disabled people who are established in employment through the public vocational rehabilitation program will pay, during the remainder of their work lives, about \$7 in Federal income tax for each Federal dollar invested in their rehabilitation.

Vocational rehabilitation embodies a philosophy which the Department is extending to other areas. The concepts of prevention and rehabilitation are being infused to the greatest extent possible into all of the Department's programs. The objective, as President Kennedy has said, is to "stress services instead of support, rehabilitation instead of relief, and training for useful work instead of prolonged dependency."

PUBLIC AND PRIVATE EXPENDITURES FOR HEALTH, EDUCATION, AND WELFARE, 1953-1963

Wilbur J. Cohen and Ida C. Merriam

Total public and private expenditures for health, education, and welfare amount to an estimated \$101 billion in FY 1963--an increase of 142 percent above the \$41.7 billion spent for similar purposes in FY 1953 (Table 1). When adjusted for changes in the price level, the increase over the decade (in fiscal 1963 dollars) is 111 percent. When population growth of almost 30 million persons in this ten-year period is also taken into account, the increase in expenditures per capita and in constant value dollars comes to 78 percent.

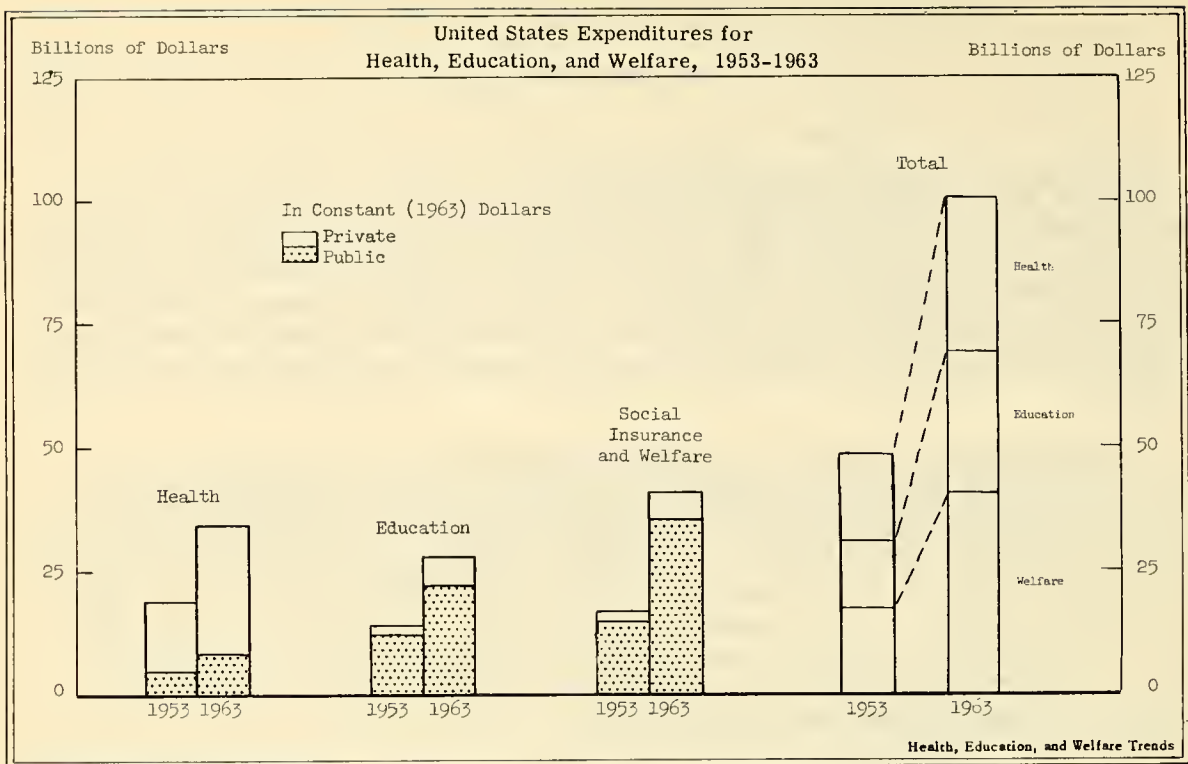
In the ten-year period 1953-1963, the share of the total output of the U. S. economy devoted to health, education, social insurance and welfare has increased substantially. Public and private expenditures for these purposes have risen from 11.6 percent of the gross national product in fiscal year 1953 to an estimated 17.8 percent in FY 1963. In the light of the other demands on the economy--for defense, for efforts to conquer space, for highways and urban renewal and rising consumption in general--this is an impressive indication of the importance which the United States attaches to human values and human needs.

In comparison with the primarily public supported expenditures for space, defense, highways, and urban renewal programs, however, expenditures for health, education, and welfare programs continue to derive a substantial proportion of their support from private funds. The public share of total health, education, and welfare expenditures is less than two-thirds and showed no increase between 1953 and 1963 (Table 1).

Population and Economic Growth Underlying Increasing Expenditures

The increase in health, education, and welfare expenditures represents an expansion of services to a larger population, an increase in the level and scope of services, and a rise in prices. Within the decade 1953 to 1963 the total population of the United States increased by 30 million and reached 188 million. The school-age population, largely concentrated in

Mr. Cohen is the Assistant Secretary (for Legislation) and Mrs. Merriam is the Director, Division of Research and Statistics, Social Security Administration, U. S. Department of Health, Education, and Welfare. For a longer time series beginning with FY 1935, see the Social Security Bulletin, November 1962. See also "The Tenth Anniversary of the Department of Health, Education, and Welfare" in this publication for legislative, organizational, and operational changes occurring between 1953 and 1963. Data are given for fiscal years 1953 and 1963 unless otherwise indicated; FY 1963 began July 1, 1962 and ends June 30, 1963. Fiscal 1963 data are advance estimates.



the 5 to 19 age group, rose from 38 million to 53 million, and the elderly population aged 65 and over increased from a little over 13 million to 17.5 million. Urban areas absorbed the population increase--the rural population actually declined. With this farm-to-city shift, problems of health, education, and welfare have become concentrated in urban-suburban areas.

The simultaneous growth of the American economy is reflected in the increase in gross national product (in constant 1962 dollars) from \$416 billion in 1952 to \$554 billion in 1962. Per capita disposable personal income (in constant 1962 dollars) rose from \$1,736 to \$2,051 in the interim. The cost of living, as measured by the consumer price index (1957-59=100), rose from 93.2 in 1953 to 106.0 at the beginning of 1963.

Expenditures for health, education, and welfare are not dollars spent in a vacuum. Rather they help the individual to remain healthy and to develop the skills essential to a space-age economy and at the same time express society's concern for the individual and his family. Economic growth depends not only upon investment in factories and research facilities, but also upon investment in human skills and services. Our economy has been able to sustain and increase expenditures in human resources,

which in turn provide the stimulus for further economic growth.^{1/}

High levels of education and health are among the foundations of economic growth as well as among its benefits. Education has made a significant contribution to growth in output in the United States in the last 50 years. Remaining in good health can cut absenteeism from work; rehabilitating the disabled can add to the Nation's production. Conversely, the failure to make such investments may mean the continuation of "functional illiteracy"--low educational attainment limiting adaptability to changing requirements for employment--and the continuation of expenditures for the current care of the ill and disabled without realizing a return from their productive employment.

There has been a growing recognition of the function of health, education, and welfare programs in a modern industrialized economy. The shift from an agricultural society to a complex technological economy based on the division of labor and a money-and-credit system of distributing income and the accompanying shift from the extended family to the small unitary family have necessitated a parallel shift in the basis for income support and the services needed by both productive and nonproductive groups in the population. The skills and competencies required in a technologically

TABLE 1

Distribution of public and private expenditures for health, education, and welfare, fiscal years 1953 and 1963

Expenditure category	Total expenditures				Per capita expenditures				Percent distribution	
	Billions of dollars			Percent increase ^{2/}	Dollars			Percent ^{2/} increase		
	1953		1963		1953		1963			
	Current	Constant ^{3/}			Current	Constant ^{3/}				
TOTAL (Net) ^{4/}	41.7	47.8	100.9	111	259	297	529	78	100 ^{5/}	100 ^{5/}
Public.....	26.4	30.3	65.9	118	164	180	346	84	63	64
Private.....	15.3	18.1	36.6	102	98	113	192	71	37	36
HEALTH.....	15.6	17.9	33.8	89	97	111	177	59	100	100
Public.....	4.1	4.7	8.5	81	25	29	44	53	26	25
Private.....	11.6	13.2	25.3	91	72	82	133	61	74	75
EDUCATION.....	12.1	13.9	27.8	100	75	87	146	68	100	100
Public.....	10.1	11.6	22.1	90	63	72	116	61	83	80
Private.....	2.0	2.3	5.7	145	13	14	30	107	17	20
SOCIAL INSURANCE AND WELFARE.....	14.5	16.6	41.1	147	90	103	216	109	100	100
Public.....	12.2	14.0	35.3	152	76	87	185	113	84	86
Private.....	2.3	2.6	5.8	121	14	16	30	87	16	14

1/ Converted to constant (fiscal 1963) dollars by the Social Security Administration on the basis of implicit price deflators for personal consumption expenditures (1954=100) developed by the National Income Division, Department of Commerce. The deflator for fiscal 1953 is 98.5 and for fiscal 1963 is an estimated 113. 2/ In constant (fiscal 1963) dollars. 3/ The duplicated total was used as a base to show the approximate distribution between public and private expenditures. The duplicated total of \$102.5 billion in FY 1963 was only 1.6 percent above the unduplicated or net total of \$100.9 billion; the difference in FY 1953 was only 1.5 percent (\$48.5 billion vs. \$47.8 billion). 4/ Total and private expenditure amounts adjusted to eliminate duplication resulting from use of cash insurance benefits to purchase medical care and educational services.

1/ The article on "Investment in Human Resources," contained in Health, Education, and Welfare Indicators for March 1962 and condensed in New Directions in Health, Education, and Welfare, includes: (1) the Council of Economic Advisers' statement on such investments and (2) a summary of the economic effects of programs administered by the Department of Health, Education, and Welfare.

developed society give new importance and new character to education and educational services. Science has transformed medical care from a personal art into a highly organized and multi-faceted discipline. Urban and suburban living have created new demands for socially organized health and welfare services. Rising levels of living have brought to the fore the problems of groups with special handicaps or unusual needs and made possible a variety of special services for them.

Social Security Administration Series on Health, Education, and Welfare Expenditures

This expenditure series, as developed by the Social Security Administration, focuses on those programs and expenditures that directly benefit individuals and families. The public programs in this series (Table 3) include many administered by other Departments of the Federal Government as well as some exclusively State and local programs. Retired persons, disabled earners, and widows and orphans have sources of support--private savings and investments, help from relatives and friends--that are not identifiable in any statistics of total income flows. The total spent under organized income-maintenance and welfare programs, however, can be measured.

The satisfactions and well-being of the people are also significantly affected by the state of the economy and the availability of jobs, by the degree of crowding and the adequacy of mass transit facilities in our large cities, by the degree of air pollution and the purity of the water supply. Programs with such general objectives such as air and water pollution are excluded, however. Expenditures for public health control activities and consumer protection (Public Health Service and the Food and Drug Administration) and for medical research are included because of their importance to personal health care.

Total, and total private, expenditures for health, education, and welfare are net figures. Data from family surveys provided the basis for the elimination of the duplication in private and in public-private outlays arising from the use of income maintenance payments (under both social insurance and private employee benefit plans) for the purchase of health and educational services. The overlap precludes the precise division between public and private expenditures. Nonetheless, the duplicated sum of all expenditures exceeds the unduplicated sum by less than two percent.

Health, Education, and Welfare Expenditures by Category

Between 1953 and 1963 dramatic increases occurred in each of the major categories. The largest increase was in social insurance. As a result by 1963 social insurance and welfare accounted for two-fifths of the total, health for one-third; and education for the remainder of total expenditures for health, education, and welfare. In constant (fiscal 1963) dollars:

- . Health expenditures increased 89 percent from \$17.9 billion to \$33.8 billion
- . Expenditures for education doubled from \$13.9 billion to \$27.8 billion.
- . Social insurance and welfare expenditures rose 147 percent from \$16.6 billion to \$41.1 billion.

Per Capita Expenditures for Health, Education, and Welfare

In constant (fiscal 1963) dollars, per capita expenditures for health, education, and welfare have increased 78 percent from \$297 to \$529 between 1953 and 1963 (Table 1). By category (in constant 1963 dollars):

- . The average expenditure per person in the United States for health increased 59 percent from \$111 to \$177.
- . The per capita expenditure for education increased 68 percent from \$87 to \$146.
- . The per capita expenditure for social insurance and welfare more than doubled from \$103 to \$216.

Public-Private Comparisons of Health, Education, and Welfare Expenditures

During the decade 1953-1963, total public expenditures for health, education, and welfare have increased somewhat more rapidly (118 percent in constant dollars) than private expenditures (102 percent). Nonetheless, the ratio between private and public expenditures for combined health, education, and welfare has remained fairly constant, with \$1 in private funds expected for approximately each \$2 of public funds.

The relative size of public and private expenditures differs substantially in the three major categories (Table 2). In 1963 the public sector accounts for 86 percent of social insurance and welfare expenditures, and 80 percent of educational expenditures, but only 25 percent of health expenditures. The public sector share has increased somewhat in social insurance and welfare (from 84 percent) but has decreased in education (down from 83 percent) and remained approximately the same in health.

This changing public-private relationship was almost entirely the result of growth in the social security system. At the end of 1962, some 63.1 million persons--nine out of ten persons in paid employment--were in jobs covered or eligible for coverage under the old-age, survivors, and disability insurance program. Ten years earlier 51.2 million persons--four out of five--had such coverage. In terms of the population aged 65 and over, 78 percent were eligible as workers, wives, or widows; and 71 percent were receiving benefits at the end of 1962. The number of OASDI

TABLE 2
Public and private expenditures for health, education, and welfare
(In millions)

Program or activity	1953 ^{1/}	1963 ^{1/}
Total expenditures, net ^{2/}	\$41,724	\$100,882
Public.....	26,420	65,904
Private.....	15,784	36,600
HEALTH--Total expenditures.....	15,630	33,781
Public expenditures.....	4,080	8,481
Health and medical services.....	3,535	7,832
General medical and hospital care--civilian programs.....	1,345	2,730
Defense Department and Medicare programs.....	610	790
Veterans' hospital and medical care.....	647	1,021
Public assistance ^{3/}	154	1,036
Workmen's compensation and TDI medical benefits ^{4/}	270	495
Medical vocational rehabilitation.....	9	26
Maternal and child health services.....	40	179
School health.....	50	122
Medical research.....	88	938
Other public health services.....	322	495
Medical-facilities construction.....	545	649
Veterans Administration and Defense Department.....	90	124
Other.....	455	525
Private expenditures.....	11,550	25,300
Health and medical services.....	11,270	24,500
Direct payments.....	8,385	15,285
Insurance benefits.....	1,762	6,950
Expenses for prepayment.....	438	1,180
Industrial in-plant services.....	185	295
Philanthropy.....	500	790
Medical-facilities construction.....	280	800
EDUCATION--Total expenditures.....	12,138	27,772
Public expenditures.....	10,124	22,106
Current.....	8,077	18,445
Elementary and secondary ^{5/}	6,544	15,586
Higher education other than veterans.....	828	2,759
Veterans.....	705	100
Construction.....	2,047	3,661
Elementary and secondary.....	1,805	3,273
Higher education.....	243	388
Private expenditures.....	2,014	5,666
Current.....	1,626	5,052
Elementary and secondary.....	680	2,057
Higher education.....	946	2,995
Construction.....	388	614
SOCIAL INSURANCE AND WELFARE--Total expenditures ^{6/}	14,496	41,102
Public expenditures.....	12,216	35,317
Social insurance.....	6,388	25,240
Old-age, survivors, and disability insurance.....	2,717	15,663
Railroad and public employee retirement.....	1,680	4,660
Unemployment insurance and employment service.....	1,202	3,447
Temporary disability insurance and workmen's compensation.....	789	1,470
Public assistance (excluding vendor payments).....	2,574	4,220
Other welfare.....	475	1,717
Vocational rehabilitation.....	26	134
Institutional and other care, school lunch, and surplus food.....	328	1,332
Child welfare services.....	121	251
Veterans' programs: compensation and pensions and other welfare services.....	2,779	4,140
Private expenditures.....	2,280	5,785
Philanthropy ^{7/}	785	1,265
Private employee benefit plans.....	1,495	4,520
Retirement.....	570	2,200
Temporary disability.....	475	860
Supplemental unemployment benefits.....	---	110
Life insurance, death benefits, and accidental death and dismemberment.....	450	1,350

Source: U. S. Department of Health, Education, and Welfare; Social Security Administration: *Social Security Bulletin*, November 1962.
^{1/} Preliminary fiscal year estimates. ^{2/} Adjusted to eliminate duplication resulting from use of cash insurance benefits to purchase medical care and educational services. ^{3/} Payments made directly to suppliers of medical care in behalf of recipients; beginning November 1960 includes Medical Assistance for the Aged payments. ^{4/} Excludes medical benefits paid under public law in California and New York by private insured and self-insured plans; such benefits included in insurance benefits under private health expenditures. TDI means temporary disability insurance. ^{5/} Excludes school health expenditures which are included under "public health and medical services." ^{6/} The estimated costs of providing medical services under many of the welfare programs are excluded from welfare and included under health. ^{7/} Total expenditures of private agencies from philanthropic contributions for such welfare services as institutional care, family counseling, recreation and day-care services, and emergency relief.

beneficiaries in current-payment status increased from 5.0 million to 18.1 million, and average monthly benefits increased--from \$49 to \$76 in the case of a retired worker. Total monthly OASDI benefits rose from a level of \$205 million in December 1952 to a level approaching \$1.2 billion in December 1962.

Part of the growth in the social security system has resulted from successive extensions of coverage, particularly to the urban self-employed in 1954, the addition of disability insurance benefits beginning in 1956, and the provision of actuarially reduced insurance benefits at age 62--for women in 1956 and for men in 1961. Expenditures for OASDI are financed entirely from trust funds derived from the insurance contributions of covered workers and their employers; they are outside the general departmental budget.

A number of other public programs also expanded significantly, but several grew from low expenditure levels. Vendor medical payments under public assistance, for which Federal matching in the form of grants was first authorized in the 1950 amendments of the Social Security Act, increased nearly seven-fold from \$154 million to \$1.0 billion. These payments include total payments under the Kerr-Mills medical assistance to the aged program amounting to \$259 million in FY 1963 of which \$134 million was from Federal funds and \$125 million was from State and local funds.

Medical research, only beginning to attract attention in 1953, increased from \$88 million to \$938 million, almost wholly through Federal action. Expenditures for maternal and child health and for crippled children's services rose sharply, primarily because of larger expenditures by State and local governments. Vocational rehabilitation programs expanded, with expenditures for medical rehabilitation increasing by 189 percent and other expenditures rising five-fold.

Private pensions increased three-fold from \$0.6 billion to \$2.2 billion, due both to an increase in the number of plans and to the maturing of those established earlier. Private pensioners and their wives now represent about 15 percent of the total aged population. Private pensions are largely supplementary to benefits under public programs. Four-fifths of all aged persons in mid-1962 were getting a regular income under OASDI, veterans, or other special public retirement program.

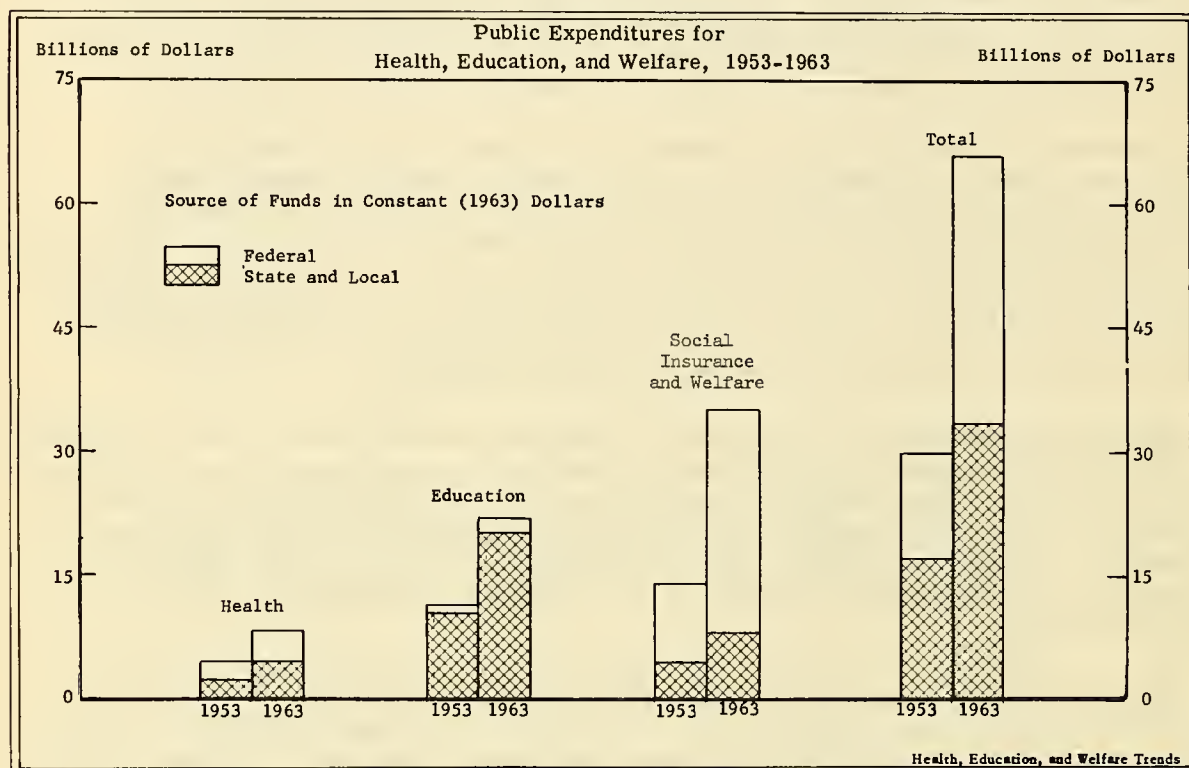
Cash benefits under private employee benefit plans in the aggregate tripled in the ten years from \$1.5 to \$4.5 billion. Medical benefits under private insurance quadrupled, going from \$1.8 to \$7.0 billion. About three-fourths of private medical insurance is provided through employee benefit plans.

Most of the money spent by private welfare agencies is used to provide services. Private philanthropic contributions used for such welfare services as institutional care, family counseling, recreation and day-care services, and emergency relief, amounting to \$785 million in FY 1953, now approach \$1.3 billion.

Public Expenditures for Health, Education, and Welfare

Public expenditures include both Federal and State and local funds (Chart 2). Expenditures from public funds for health, education, and welfare accounted for about two-fifths of all governmental expenditures (Federal, State and local) in FY 1963 as compared with one-fourth in FY 1953.

CHART 2



Public expenditures (in constant dollars) for health, education, and welfare increased 118 percent from \$30.3 billion in 1953 to \$65.9 billion in 1963 (Table 3). Federal expenditures over-all increased more rapidly (153 percent) than State and local expenditures (91 percent).

Within the public sector there have been differential increases by category. Federal expenditures increased far more rapidly than State and local expenditures in social insurance and welfare (181 as compared with 90 percent), somewhat more rapidly in health (95 vs. 71 percent), but less rapidly in education (34 vs. 97 percent).

Shifts during the decade 1953-1963 brought the Federal share to nearly one-half of all public expenditures for health, education, and welfare by 1963. By category, the Federal share now comprises three-fourths of public

social insurance and welfare expenditures, but less than one-half of health expenditures, and substantially less than one-tenth of expenditures for education (Table 4).

Public expenditures for education more than doubled from \$10.1 to \$22.1 billion between 1953 and 1963. State and local expenditures for education increased from \$9.1 billion to \$20.5 billion; Federal expenditures increased only from \$1.0 billion to \$1.6 billion. In a period of expanding enrollments and of continuing heavy inter-state migration of families with school-age children, the share of educational expenditures borne by the Federal Government declined from 10 percent to 7 percent. The only sub-category in which the increase in Federal spending far outpaced that in State and local spending was in construction costs for higher education facilities; the absolute amount of Federal funds for this purpose was still only one-tenth of comparable State and local spending in 1963.

The FY 1963 expenditures for training under the area redevelopment and the manpower training and development programs (\$23 million) are included with higher education other than veterans. These funds are appropriated to the Department of Labor but transferred to the Department of Health, Education, and Welfare and administered by the Office of Education.

The social insurance and welfare item for unemployment insurance and employment service includes the \$59 million spent under these manpower programs in FY 1963 for special counseling and placement activities and for allowance payments. State expenditures for unemployment insurance and employment services combined increased somewhat more than Federal expenditures for these purposes (196 percent as compared with 158 percent) in spite of these new Federal programs.

Federal Grants-in-Aid to State and Local Governments

Intergovernmental transfers in the form of grants-in-aid have provided an important vehicle by which the Federal Government encourages the States through financial assistance to undertake or expand key programs or activities. Total Federal general expenditures increased from \$72.5 billion in FY 1953 to \$87.6 billion in FY 1962; grants to the States during the period increased from \$2.8 billion (3.9 percent) to \$7.7 billion (8.8 percent). Grants of \$1.7 billion made by the Department of Health, Education, and Welfare to States, local communities, and public institutions accounted for 63 percent of total Federal grants-in-aid in FY 1953, but departmental grants of \$3.2 billion accounted for only 42 percent of these expenditures in FY 1962. Grants comprised nine-tenths of total departmental expenditures

TABLE 3

Public expenditures for health, education, and welfare by source of funds

Expenditure and source of funds	Billions of Dollars			Percent distribution		Percent increase 1953-1963 ^{2/}
	1953 current	1953 constant ^{1/}	1963	1953	1963	
TOTAL	26.4	30.3	65.9	100	100	118
Federal	11.1	12.8	32.4	42	49	153
State and Local	15.3	17.5	33.5	58	51	91
HEALTH	4.1	4.7	8.5	100	100	81
Federal	1.8	2.0	3.9	43	46	95
State and Local	2.3	2.7	4.6	57	54	71
EDUCATION	10.1	11.6	22.1	100	100	90
Federal	1.0	1.2	1.6	10	7	34
State and Local	9.1	10.4	20.5	90	93	97
SOCIAL INSURANCE AND WELFARE	12.2	14.0	35.3	100	100	152
Federal	8.4	9.6	26.9	68	76	181
State and Local	3.9	4.4	8.4	32	24	90

^{1/} Converted to constant (fiscal 1963) dollars by the Social Security Administration on the basis of implicit price deflators for personal consumption expenditures (1954-1960) developed by the National Income Division, Department of Commerce. The deflator for fiscal 1953 is 98.5 and for fiscal 1963 is an estimated 115. ^{2/} In constant (fiscal 1963) dollars.

TABLE 4
Public expenditures for health, education, and welfare, by source of funds
(In millions)

Program or activity	Expenditures ^{1/}			
	From Federal funds		From State and local funds	
	1953	1963	1953	1963
Total public expenditures.....	\$11,146	\$32,397	\$15,283	\$33,505
HEALTH--Total.....	1,753	3,914	2,331	4,567
Health and medical services.....	1,541	3,556	2,004	4,276
General medical and hospital care--civilian programs.....	68	136	1,277	2,594
Defense Department and Medicare programs.....	610	790	---	---
Veterans' hospital and medical care.....	647	1,021	---	---
Public assistance ^{2/}	16	522	138	514
Workmen's compensation and TDI medical benefits ^{3/}	6	8	264	487
Medical vocational rehabilitation.....	4	16	4	10
Maternal and child health services.....	27	48	24	131
School health.....	---	---	50	122
Medical research.....	88	894	---	44
Other public health services.....	75	120	247	375
Medical-facilities construction.....	212	359	333	290
Veterans Administration and Defense Department.....	90	124	---	---
Other.....	122	235	333	290
EDUCATION--Total.....	1,041	1,605	9,083	20,500
Current.....	972	1,494	7,106	16,950
Elementary and secondary ^{4/}	214	486	6,330	15,100
Higher education other than veterans.....	52	909	776	1,850
Veterans.....	705	100	---	---
Construction.....	70	111	1,977	3,550
Elementary and secondary.....	65	73	1,740	3,200
Higher education.....	5	38	238	350
SOCIAL INSURANCE AND WELFARE--Total ^{5/}	8,352	26,878	3,863	8,438
Social insurance.....	4,173	19,742	2,215	5,499
Old-age, survivors, and disability insurance.....	2,717	15,663	---	---
Railroad and public employee retirement.....	1,120	3,210	560	1,450
Unemployment insurance and employment service.....	289	747	913	2,700
Temporary disability insurance and workmen's compensation.....	47	121	742	1,349
Public assistance (excluding vendor payments).....	1,344	2,318	1,229	1,902
Other welfare.....	170	774	305	942
Vocational rehabilitation.....	19	87	7	46
Institutional and other care, school lunch, and surplus food.....	143	666	185	665
Child welfare services.....	8	20	113	231
Veterans' programs: Compensation and pensions and other welfare services.....	2,665	4,044	114	95

Source: U. S. Department of Health, Education, and Welfare; Social Security Administration; Social Security Bulletin, November 1962. ^{1/} Preliminary fiscal year estimates.
^{2/} Payments made directly to suppliers of medical care in behalf of recipients, beginning November 1960 includes Medical Assistance for the Aged Payments. Excludes medical benefits paid under public law in California and New York by private insured and self-insured plans. ^{3/} TDI means temporary disability insurance. ^{4/} Excludes school health expenditures which are included under "health and medical services." ^{5/} The estimated costs of providing medical services under many of the welfare programs are excluded from welfare and included under health.

from general revenues in 1953 and about three-fourths in 1962. Much of the remainder goes for direct research (mostly for health), patient-care activities, and regulatory programs.

PART III

CURRENT AND EMERGING ISSUES AND OPPORTUNITIES

Health

AIR POLLUTION

Roy Head and Luther W. Stringham

Air pollution is the presence in the air around us of substances put there by the activities of man, in concentrations sufficient to interfere directly or indirectly with his comfort, safety, or health, or with the full use and enjoyment of his property.

Air Pollution No Longer Primarily a Smoke Problem

Until about 30 years ago, concern with air pollution was limited to smoke or other pollutants that could be seen or smelled. These pollutants often were tolerated because smoke in a community meant busy factories, more business, and more jobs. Gradually the public began to demand curbs against excessive smoke, and a number of American cities, led by St. Louis and Pittsburgh, enacted control legislation.

Since then, advances in technology--new fuels, better combustion, improved dust collectors--have further reduced the level of settleable solids in our cities. But this same technology--advancing ever faster, especially since World War II--has discharged scores of new pollutants, many of them invisible, into the air we all must breathe, and has multiplied the volume of many older pollutants.

Today's Air Pollutants Are Numerous and Varied

Today's pollutants are such waste products as the dusts, smoke, fumes, and liquid droplets that hide the sun, delay aircraft operations, and soil our buildings and our clothing. They are gaseous discharges like sulfur dioxide, carbon monoxide, oxides of nitrogen, and hydrogen sulfide. They are metallic fumes and dusts from lead, vanadium, iron, and their compounds. They are fluorine and phosphorus compounds which have proved harmful to plants and livestock. Finally, they are contaminants created in the air, under the influence of sunlight, by the interaction of some of these substances. For example, invisible clouds of hydrocarbons and oxides of nitrogen are "triggered" by sunlight to form photochemical smog of the typical Los Angeles variety.

The Sources of Air Pollutants are Equally Varied

Air pollutants come from the exhaust pipes and the crankcases of our automobiles and trucks, from the chimneys of our homes, and from trash and leaf fires in our backyards. They come from municipally owned

Mr. Head is the Assistant Chief of the Information and Education Office, Division of Air Pollution, Public Health Service; Mr. Stringham is the Director, Office of Program Analysis, Office of the Assistant Secretary (for Legislation), U. S. Department of Health, Education, and Welfare. See section on "Air Pollution," in the Report of the Committee on Environmental Health Problems (PHS Pub. No. 908, 1962) for consideration of long-range objectives, with particular reference to manpower, research, and relationships with other Federal agencies. A basic source is Proceedings: National Conference on Air Pollution, 1958 (PHS Pub. No. 654, 1959).

power plants and burning municipal dumps, from apartment house incinerators and commercial enterprises in every city and town. They come from oil refineries and storage tanks, from trains, airplanes, and vessels. They come from factories, of almost every kind. All these are the more familiar sources of air pollution.

U. S. Growth Factors Will Multiply These Sources

Present-day forces in this country which threaten to worsen air pollution in the coming years include continuing increases in our population, urbanization, transportation, and industrialization, and in scientific research, which is creating new processes and products. (See charts.) Each of these is increasing rapidly, the rate of increase is accelerating, and the growth of each factor stimulates the growth of the others.

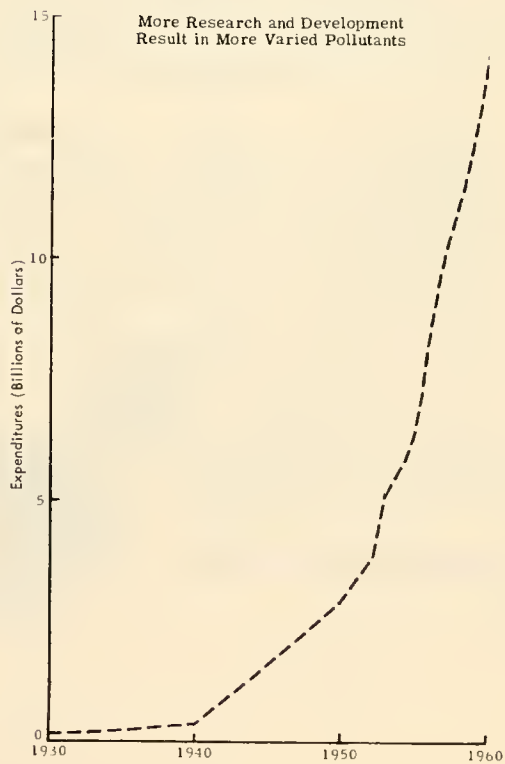
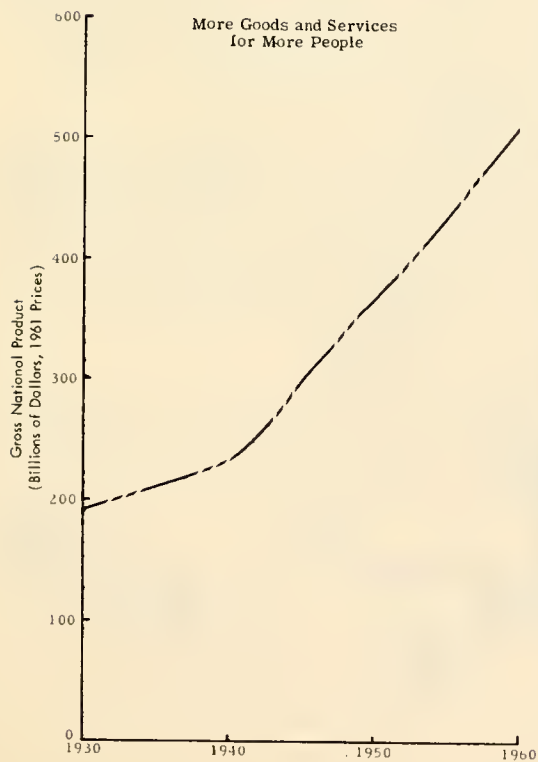
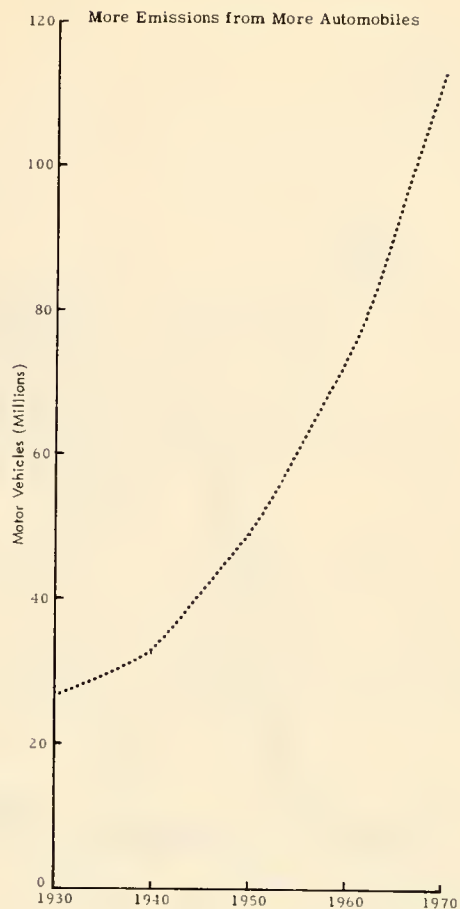
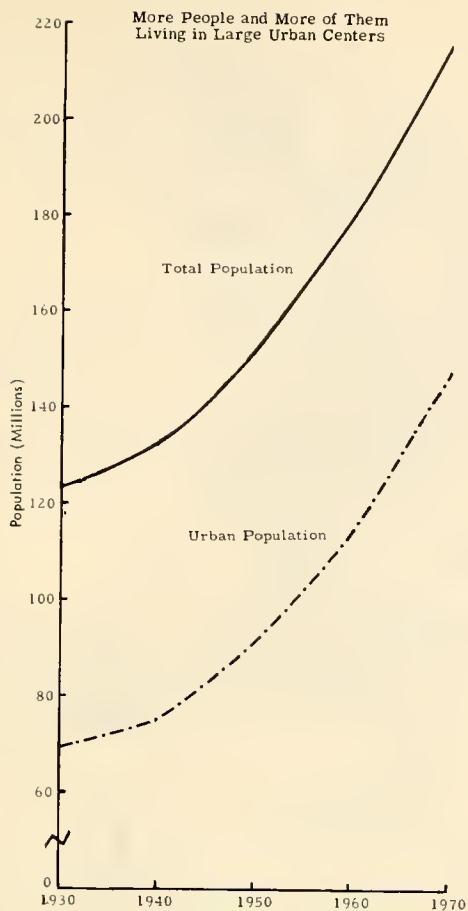
For example, the impact of population growth is compounded by increasing urbanization. From 1940 to 1950, "Standard Metropolitan Areas" absorbed 81 percent of our total population growth and by 1955 were absorbing 97 percent. By 1970 it has been estimated that three out of four people will be living in only 10 percent of the land area of the United States. Thus, an increasing portion of the waste products discharged to the atmosphere will be released into relatively small segments of the air mass.

Atmospheric Conditions Affect the Degree of Pollution

The degree of air pollution thus is related to the variety and quantity of materials discharged into the atmosphere. It is also a product of atmospheric conditions which prevent adequate air circulation. Normally, air currents disperse and dilute the pollutants. Air near the ground is warm and tends to rise through the cooler upper layers of the atmosphere. If there is an inversion in temperature, however, the air near the ground is cooler than the upper layers of the atmosphere, and the abnormal layer of warm air acts as a lid, effectively boxing in the air below.

The Air Pollution Problem is Widespread in the United States

Twenty years ago, no one in Los Angeles had ever complained of smog-caused eye irritation, and that city did not institute its first control measure until 1947. A dozen years ago, San Francisco was paying little attention to its air pollution problem; today the San Francisco Bay Area has one of the most active air pollution control agencies in the nation. In 1953, New York City had its first detected smog "episode," to which some 200 deaths are attributed. Washington, D. C., probably the least industrialized U. S. city of its size, had its first recorded instance of Los Angeles-type smog in June 1960; there have since been several more. Also in 1960, Boston had its famous "black rain," a literal downpour of smoke, soot, or oil, or a mixture of all three.



Approximately 90 percent of our urban population lives in localities which have air pollution problems. Large city or small, industrialized or not, few cities are immune. Many of these localities are large urban complexes which spread across State boundaries. (See map.) It is estimated that all 212 communities (Standard Metropolitan Areas) with a population greater than 50,000 have air pollution problems; approximately 40 percent of the communities in the 2,500-50,000 population range have problems. In total, about 6,000 U. S. communities have air pollution problems of varying degrees.

Farmers, too, are affected. In Florida, fluorides from phosphate processing plants accumulate in and on vegetation. These fluorides, ingested by cattle, can cause fluorosis, which may seriously affect milk production. In many other States, including California, Idaho, Montana, New Jersey, Oregon, Tennessee, Utah, and Washington, damage from air pollution has been detected and identified, with claims of damage ranging from a slight reduction in crop yields to the loss of the entire farm enterprise.

Economic Losses Attributed to Air Pollution

Current national estimates of economic damage caused by air pollution range from \$4 billion to \$11 billion annually. They include injury to livestock and vegetation, corrosion and soiling of structures and materials, interference with visibility, reduction of property values, etc.

Adverse Health Effects Attributed to Air Pollution

Acute episodes have demonstrated that heavy concentrations of air pollutants can produce acute illness and sudden death. Of greater significance, however, is the long-term exposure of community populations to lower concentrations of air pollutants, which may result in gradual deterioration of health, chronic disease, and premature death.

An impressive body of circumstantial evidence is now accumulating which links air pollution with increased mortality from cardio-respiratory causes, increased susceptibility to respiratory disease, and interference with normal respiratory function. Among the diseases so linked to air pollution are asthma, chronic bronchitis, emphysema, and lung cancer. The last two especially have been increasing rapidly in this country.

Current Efforts to Deal With the Air Pollution Problem

Research, conducted or sponsored by the Public Health Service, on the nature, sources, scope, and effects of air pollutants and on instrumentation and other measures for their better control.

Technical assistance to States and communities by the Public Health Service.

THERE ARE AIR POLLUTION PROBLEMS IN THE 212 AREAS WITH 50,000 OR MORE RESIDENTS

★ Stars indicate interstate areas

Area Definitions by Federal Committee on Standard Metropolitan Statistical Areas under the direction of U S Bureau of the Budget

★ Stars indicate interstate areas
Area Definitions by Federal Committee on
Metropolitan Statistical Areas under the direction
of U S Bureau of the Budget

STANDARD METROPOLITAN STATISTICAL AREAS; 1960

DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

Technical training for air pollution personnel at Federal and local governmental levels and in industry, at the Public Health Service's Robert A. Taft Sanitary Engineering Center in Cincinnati, and in several universities.

Industry is reported to be spending as much as \$300 million annually for air pollution control measures.*

State and local control programs, which vary widely in scope and effectiveness.

Some of the principal research activities and the present status of State and local control programs are summarized below.

Illustrative Research Activities**

Research projects conducted or sponsored by the Public Health Service are partly engineering and partly medical, and many of them involve interdisciplinary collaboration.

The most widespread project is the National Air Sampling Network, which has at least one urban and one nonurban air sampling station in every State. (See map.) The Network provides continuing information about what is in the air and in what concentrations, and helps cooperating State and local agencies to deal with their own specific problems.

On June 30, 1962, the Surgeon General will report on the results of a special two-year study of the effects of automotive exhaust on health. This study is being conducted at the Sanitary Engineering Center. The study includes human eye irritation, vegetation damage, and effects on animals of short-term and chronic exposures. Also being examined are the effects of variations in the chemical composition of the exhaust.

Other research projects include studies of the nature, sources, and interactions in the air of pollutants; of meteorological aspects; and of improved instrumentation and other control measures.

Other Research Projects Concentrate on Health Effects of Air Pollution

The circumstantial evidence which links air pollution to certain cardio-respiratory diseases comes from three types of investigations: (1) statistical studies of past morbidity and mortality, as correlated with geographic location and other factors associated with air pollution; (2) ongoing epidemiological studies of morbidity and respiratory function as related to variations in air pollution; and (3) laboratory studies of responses by animals--and by humans in some cases--to exposure to various pollutants, either singly or in combination.

*On December 6, 1961, the automotive industry agreed to install blowby devices on all new cars, starting with 1963 models.

**The Public Health Service programs are authorized by P.L. 84-159 (1955) and P.L. 86-493 (1960).

213-Station
NATIONAL AIR SAMPLING NETWORK - 1962
U.S. Public Health Service



The following results are typical of recent findings from these studies:

- Death rates from cardiorespiratory causes are greater in urban than in rural areas and generally increase with city size. Variations in morbidity within cities correlate with variations in air pollution.

- The Medical Director of a large eastern industrial firm recently reported a similar correlation between total atmospheric sulfates and employee absenteeism due to respiratory illness among women workers.

- Studies in Donora, Nashville, New Orleans, and elsewhere point to the impact of air pollutants upon elderly persons with cardio-pulmonary conditions in rendering them more susceptible to pulmonary irritation and respiratory embarrassment.

- An investigator at the University of Southern California has reported the production of a typical human form of lung cancer, by inhalation alone, in laboratory animals exposed to ozonized gasoline subsequent to their recovery from infection with influenza virus.

Although hundreds of other research projects are under way, and much more research is needed, a great deal has already been learned about air pollution in a relatively short time. We already know how to control or prevent the majority of air pollutant emissions at costs to the community which would generally be less than the economic damages they produce.

Nationwide Needs Vs. Current Status of Control Activities

Public Law 84-159, (passed in 1955) specifically reserved responsibility for the control of air pollution to States and communities. Accordingly, the wide application of technical procedures now available for air pollution control is dependent upon the development and operation of community programs on State and local government levels. Community control programs, however, are still far from adequate.

On the State level, during the past decade, there has been some improvement in the status of air pollution legislation and in the development of comprehensive programs dealing with problems in this area. Some 15 States now have enactments which authorize specific programs, whereas no State had such authorization in 1950.

According to a recent survey, there are only 106 local control programs which have full-time staffs. These programs serve 342 local political jurisdictions, which contain about 45 percent of the national urban population. Only 28 of these control programs have five or more full-time employees. The total expenditure by local governments for air pollution control presently is about \$8 million annually, more than half of which is expended in the State of California alone.

The median annual expenditure for air pollution control is about 10 cents per capita. That figure compares with as much as \$65 per capita for air pollution's economic costs alone.

Thus, the most immediate need is to apply--far more widely than it is being applied at present--what is already known about air pollution control.

WATER RESOURCES AND POLLUTION CONTROL

Helen E. Martz and Earl E. Huyck

Clean water is essential to our industrial technology, agriculture, the conservation of natural resources, our health and welfare, and even life itself. Polluted water can lead to debilitating illness, premature death, and reduced economic productivity.

The Nation's limited and relatively fixed supply of fresh water is becoming increasingly polluted. How to conserve and make most effective use of available water is emerging as a serious natural resource problem.

Demand is Overtaking Supply

The Nation's water supply is largely determined by its precipitation--rain and snow. An average of 30 inches falls on the continental United States a year (Map 1). But only about 2 inches is available to man on a dependable year-round basis; 22 inches return to the atmosphere through transpiration and evaporation, and most of the remainder runs back to the ocean and is gone before it can be used.

The ocean itself offers considerable potential as a source of usable water, and, as costs are reduced, saline water conversion will be increasingly utilized along our southern California and western Gulf Coast areas. For the foreseeable future, however, there are economic limits to the degree that water can be de-salted and moved any substantial distances inland for irrigating fields and for supplying urban populations. Owing to the costs of conversion and movement of water from the sea, the water now in the country's rivers, lakes, and streams, plus the collected precipitation, constitutes the total of the Nation's dependable fresh water supply.

Dr. Martz is a Social Welfare Adviser in the Bureau of Family Services, Welfare Administration; and Dr. Huyck is a Program Analysis Officer in the Office of the Assistant Secretary (for Legislation), U.S. Department of Health, Education, and Welfare. Based on data provided by: (1) Public Health Service, Division of Water Supply and Pollution Control--Evaluation of Water Supply and Pollution Control Needs, November 1960; Proceedings of the National Conference on Water Pollution, December 1960; Clean Water--A Chart Book on America's Water Needs, 1900-1980, December 1960; Report of the Committee on Environmental Health Problems (PHS Pub. No. 908, 1962); and Pollution-Caused Fish Kills in 1961 (PHS Pub. No. 847-1961); and (2) U. S. Department of the Interior, Office of the Secretary, Office of Saline Water, and the Geological Survey--Resources for Tomorrow: 1961 Annual Report. See also: Wilbur J. Cohen and Jerome N. Sonosky, "Federal Water Pollution Control Act Amendments of 1961," Public Health Reports, February 1962. U. S. Senate, Select Committee on National Water Resources; Water Resource Activities in the United States; 1960 Committee prints--No. 3, "National Water Resources and Problems;" No. 30, pertaining to re-use of water; No. 24, water quality management; No. 7, municipal use; No. 8, industries; and No. 13, agriculture. "Water: CW Special Report," Chemical Week, October 7, 1961.

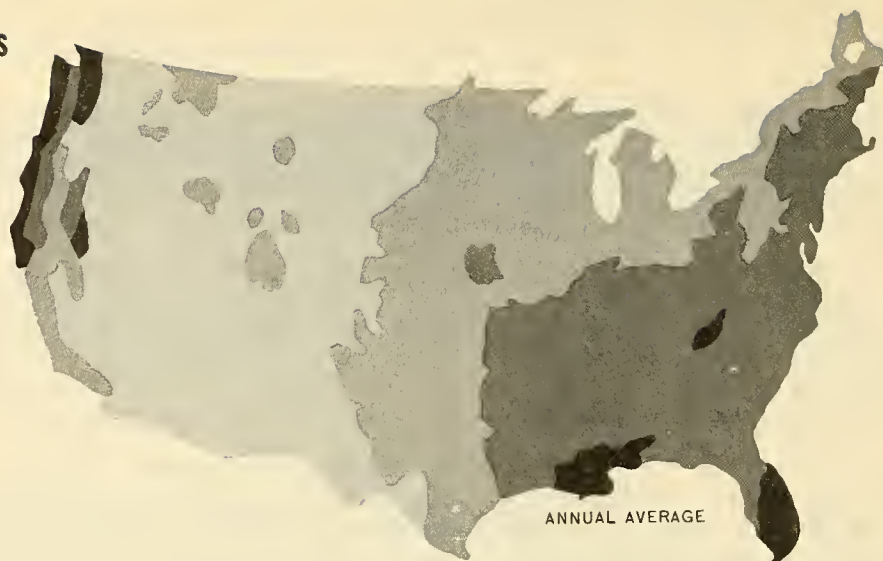
PRECIPITATION PATTERNS

INCHES : UNDER 20

20 TO 40

40 TO 60

OVER 60



ANNUAL AVERAGE

Through conservation measures, the 315 billion gallons a day available (1960) is expected to be developed to about 515 billion gallons by 1980 (Chart 1). But the need for water is expected to nearly double present use by 1980, and another doubling of need is predicted by the year 2000. Yet, foreseeably, the most that can ever be hoped for is between 600 and 650 billion gallons of water a day.

Use Rate of Fresh Water Vs. Estimated Dependable Supply
(Billions of Gallons Per Day)

	1900	1920	1940	1950	1960	1970	1980
Rate of Use	40.2	91.6	136.4	202.7	322.9	411.2	597.1
Dependable Supply	95.0	125.0	245.0	270.0	315.0	395.0	515.0

Water re-use will become increasingly necessary as our water demands increase with continued economic and population

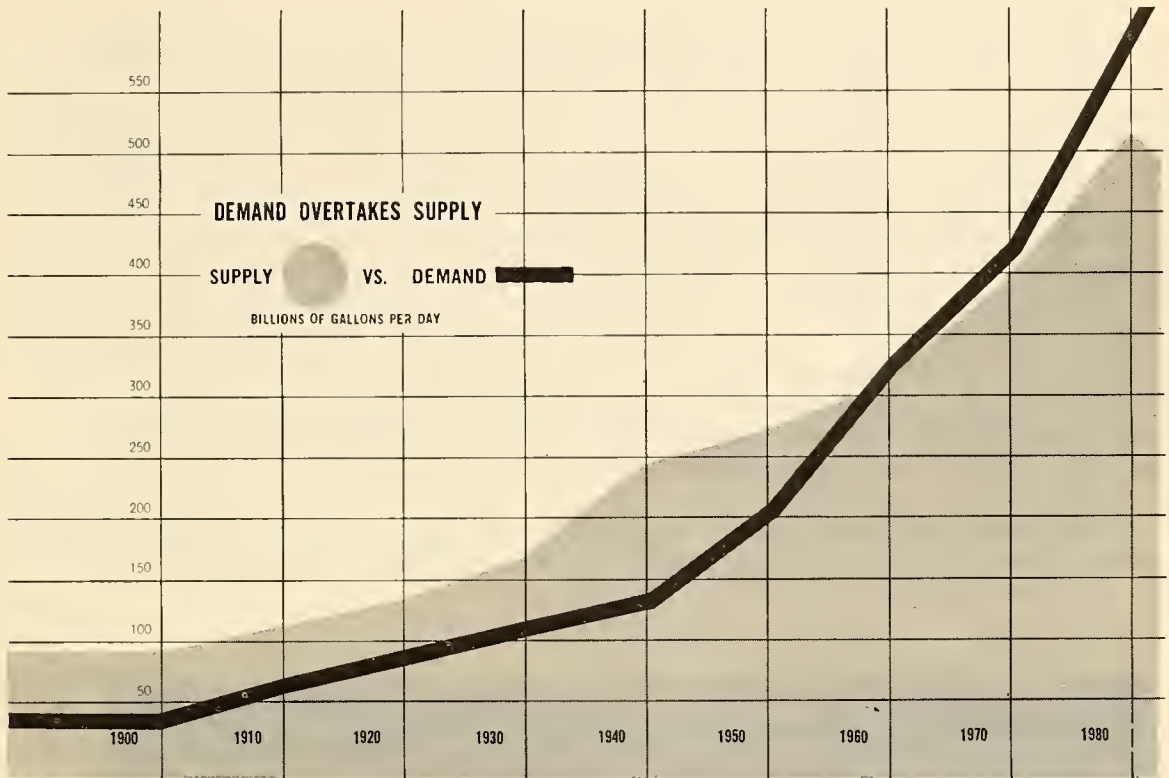
growth. Re-use, however, depends on our ability to prevent deterioration of the supply to such an extent that re-use becomes impracticable. The control of water quality is the key to the amount of re-use that can be achieved and therefore to the amount of water we shall have available for future needs. The control of water quality requires the effective control or treatment of pollution wastes at their source, supported by the regulation of receiving streams to the degree necessary to assimilate treated waste effluent discharged to them.

In some arid areas of the country heavy water demands already exceed the available supply, and multiple re-use is the only means of meeting the demands. Present waste treatment technology is not sufficiently advanced for the complete treatment of waste water so as to make possible indefinite re-use of water. These waste waters, however, contain only a fraction of the dissolved solids present in most saline waters. The waste waters are immediately available and need not be transported long distances or pumped

from deep underground sources. It is conceivable that a supply of water can be used over and over, if means can be found to remove the small but important amounts of dissolved materials remaining after currently available treatment.

Advanced waste treatment research is actively being undertaken at the present time to develop the necessary technology. Potential methods for treating resistant wastes feature the use of physical-chemical separation principles that have already been used to some extent in sanitary engineering.

Chart 1



Unprecedented Population and Economic Growth Requires More Water

Increasing population in the United States, which more than doubled since 1900 and is expected to nearly double again by the year 2000, requires more clean water for drinking and for other home uses. With higher levels of living, the bathrooms, kitchens and home laundries available to most people today consume far more water than a generation ago.

Industrial growth, essential to a growing population and an expanding economy, requires an increasing amount of water to produce the things more people need to eat, wear, and use. Industry increased its output of goods by 700 percent since 1900 and is expected to more than double this volume

Past and Future Use of Fresh Water

(Billions of Gallons Per Day)

	1900	1920	1940	1950	1960	1970	1980
Municipal	3.0	6.0	10.1	14.1	22.0	27.0	37.2
Industrial	15.0	27.2	52.0	84.0	159.9	218.3	394.2
Agricultural	22.2	58.4	74.1	104.6	141.0	165.9	165.7
Total	40.2	91.6	136.4	202.7	322.9	411.2	597.1

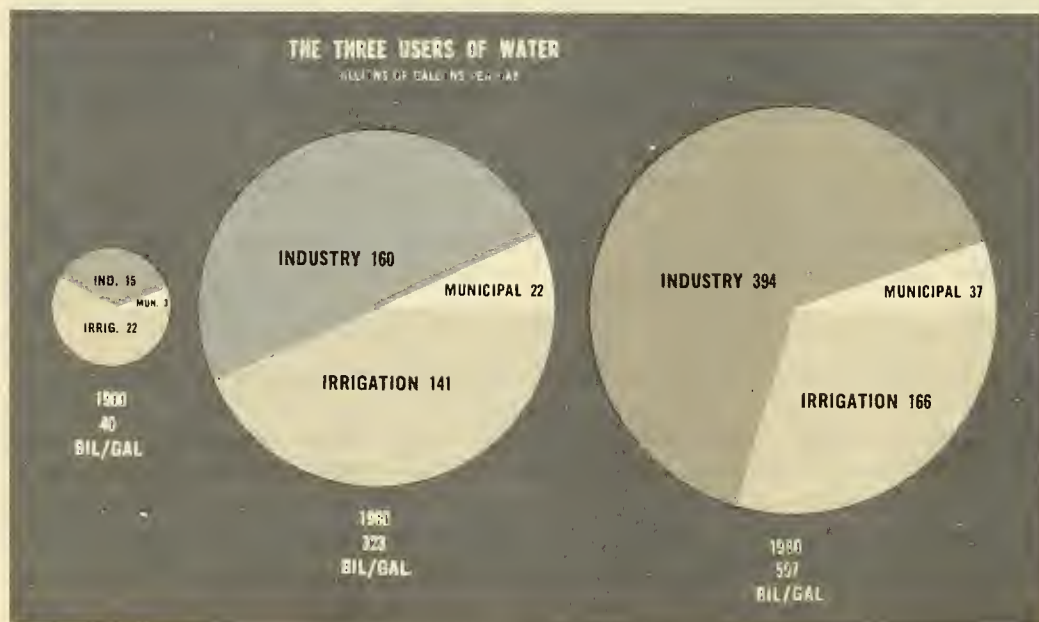
by 1980. Industry, the largest user of water, will need twice as much by 1980. With new technologies and automation, one can only speculate on the increased volume of production by the year 2000 and its increased need for water, for many of the newer technologies are

those which use the greatest amount of water. To provide more food for more people, water is increasingly used for irrigation. Water is essential for fish and aquatic life, and wildlife.

More people, higher income, more leisure time, and better transportation also have kindled a new national interest in recreation, with increasing use of clean water for sports, fishing, boating, and hunting. Recreation is a principal source of income in some States, and a major source in others. According to the National Recreation Survey conducted by the Outdoor Recreation Resources Review Commission, 44 percent of the population prefer water-based recreation activities over any others. This trend is likely to continue as more young people acquire an interest in water sports, new reservoirs are constructed, the boating industry wins new converts, and relatively new forms of water-based recreation, such as skin diving and water skiing, become increasingly popular. The trend will be accelerated if pollution control programs are successful in cleaning up streams, lakes, and seashore areas that are presently off limits for recreation, or are now so unattractive as to preclude many activities.

The changing character of America is reflected in the changing demands for water among municipalities, industry, and agriculture (Chart 2).

Chart 2



Many People and Industries Are Not Near an Adequate Water Supply

Nature distributes water unevenly, seasonally and geographically (see Map 1). For example, about two-thirds of the rainfall is on the Eastern and one-third, on the Western half of the United States; evaporation losses are highest in the Southwest and lowest in the Northwest. Water, therefore, has to be stored and transported from areas of surplus to areas of shortage.

The accelerating westward migration of people into water-short areas of the West and Far West imposes additional burdens on existing supplies of fresh water. The spring runoff from winter snow is closely watched and channeled. There are numerous claimants for the division of the existing water supply--State and local governments, irrigation farmers and industrial firms. The courts are deeply involved with the problem of fair distribution of water from one water basin to another, the 10-year litigation over the waters of the Colorado River being a case in point. Voters are asked to pass upon bond issues for the necessary capital investment for water facilities. California voters in 1960, for example, approved the issuance of \$1.75 billion in general obligation bonds to undertake a water conservation and distribution program to be completed by about 1982. Water from the Feather River in northern California will then flow 740 miles through rivers, reservoirs, and tunnels as far as San Diego County to take water to the farm lands and to the people in the cities.

An increasing proportion of the population now live in metropolitan areas--70 percent in contrast to 15 percent in 1900--and the number of metropolitan areas is increasing. Water must be transported to those cities not near an adequate supply of fresh water. Growth of cities will multiply the transportation problem. Many water-using industries which locate in water-short regions because of other advantages aggravate water supply problems.

Pollution is Increasingly Spoiling the Nation's Usable Water Supply

All wastes that are not burned, buried or released to the atmosphere go back into the basic fresh water supply. The increasing discharge of pollutants is directly related to developments contributing to the increased demand for water. An expanding population increases the volume of waste, and the crowding of people into urban centers intensifies the problems of waste disposal. Changing land practices involving the increased application of commercial fertilizers, and development and widespread use of a vast array of new herbicides and insecticides contribute to pollution problems through land drainage.

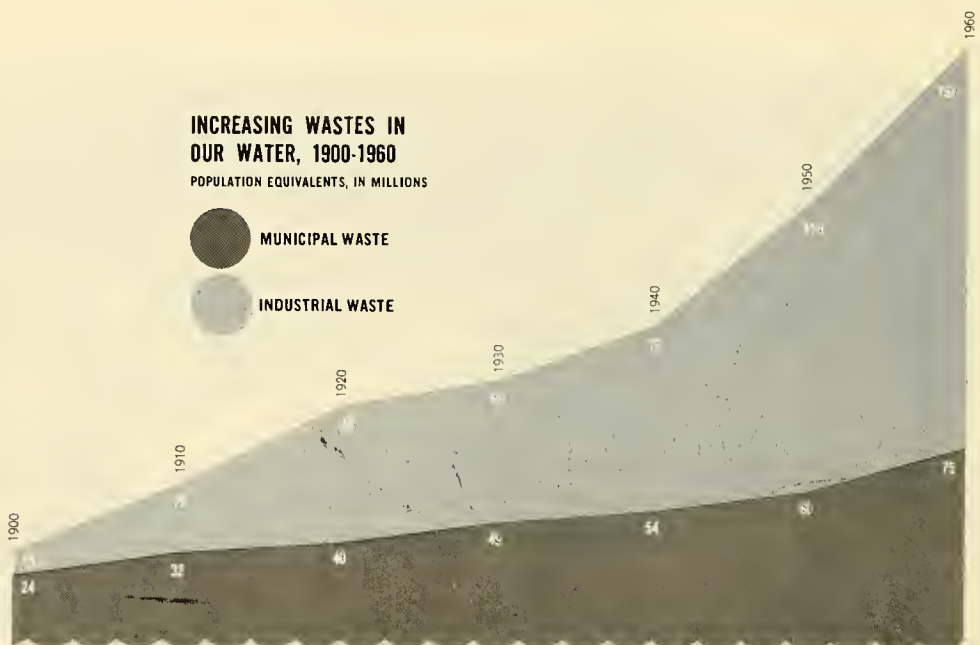
Increased production of goods increases the amount of common organic and inorganic industrial wastes, and new technologies produce new wastes that defy current ability to treat or control them, and in some instances, even to detect their presence in water. Substances which are harmless in themselves react chemically with other substances to produce noxious odors and tastes, exotic and undesirable compounds.

Detergents and other synthetic wastes, not affected by present-day treatment processes, are reaching the consumer in increasing amounts. Synthetic detergents were of minor importance until the late 1940's. By 1958, however, the consumption of synthetic detergents in the United States amounted to 3.8 billion pounds--three times the consumption of soap. Almost the entire annual production of synthetic detergents is eventually discharged to surface or ground water. Unlike soap, which is readily decomposed, several of the compounds in synthetic detergents resist chemical and biological decomposition and partially survive sewage treatment, river self-purification processes, and ground water travel, and, even after subsequent processing in water treatment plants, appear in varying reduced amounts in drinking water.

There is now nearly six times as much pollution in our rivers, streams and lakes as 60 years ago, and the amount is still increasing. For the foreseeable future, the Nation's streams must continue to function as the final place of disposal for its liquid wastes (Chart 3).

Some 23 States border on the ocean, and their estuarine and coastal waters have been subject to serious and increasing pollution for many years. Sea water intrusion is caused by excessive pumping of fresh ground water, which lowers the water table, allowing salt water to flow into the ground water aquifers. Already a widespread problem, it is now of particular significance in California, Maryland, New Jersey, Texas, and New York. Oil fields brine disposal practices also are causing salt pollution of ground waters in the Midwest and Southwest. Sewage and industrial waste oxidation ponds, and waste storage lagoons are sometimes additional agents of ground water pollution.

Chart 3



The Backlog of Sewage Treatment Needs is Great

To eliminate the backlog of needed municipal sewage treatment works, to replace plants that will become obsolete, and to provide for the continuing population growth in our urban areas will require an annual average expenditure of \$600 million for the next decade, according to Public Health Service estimates.

The Conference of State Sanitary Engineers in May 1962 disclosed that 5,290 communities serving 43 million people, or nearly one-fourth of the Nation's total population, require new sewage treatment plants, plant enlargements, or additional and more effective treatment facilities. The estimated cost of eliminating this backlog including ancillary works is \$2.1 billion (Table 1). Needed sewage treatment works for industry are of the same order of cost, and the need for new treatment processes applies to industrial as well as municipal wastes.

As shown in Table 2, every State has communities with unmet sewerage needs. Of the 50 States and four other political divisions reporting treatment needs, 26 States showed improvement in municipal treatment facilities, four listed no change, and 24 reported greater unmet needs in 1962 than in 1961, when a similar inventory was conducted.

The aggregate population of communities with less than 25,000 residents needing municipal sewage treatment works accounts for only 32 percent of the total population of places in all size categories but comprises 62 percent of the total estimated cost of such works.

Table 1
Needed Municipal Sewage Treatment Works
January 1, 1962

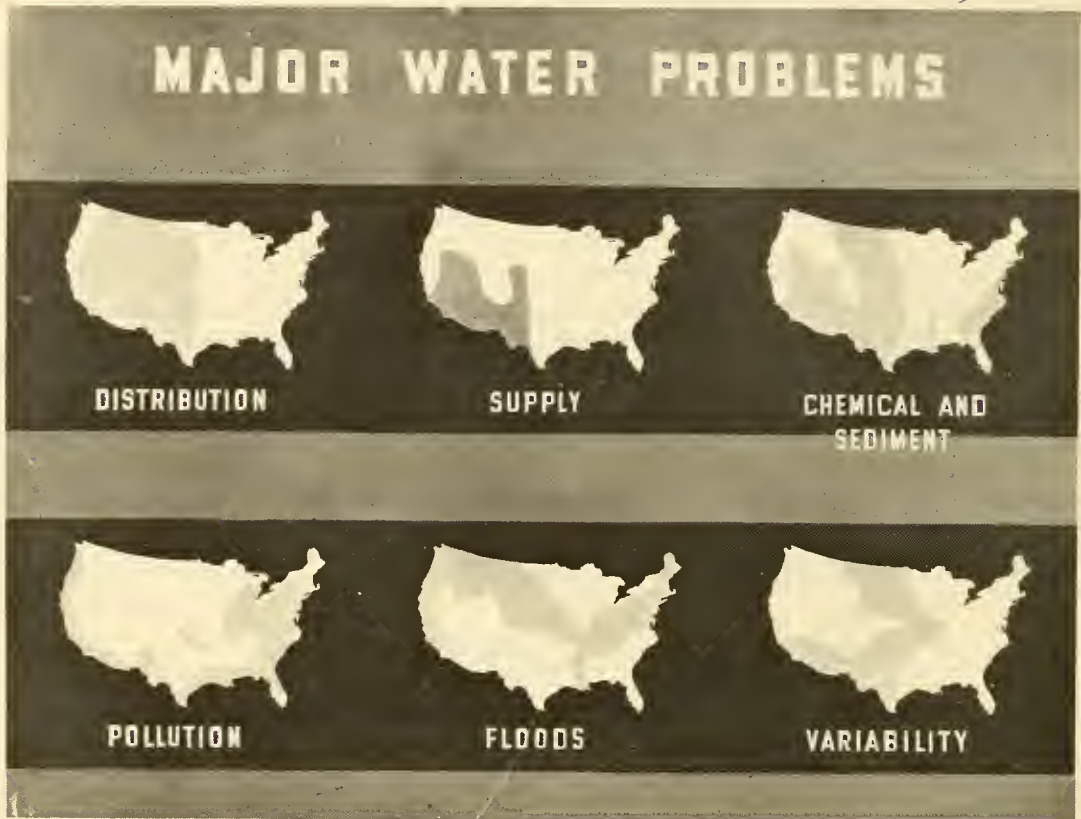
Population size group	Number of Projects				Total projects			
	Total	New plants	Expansion	Additional treatment	Population served		Estimated cost	
					Number (000's)	Per-cent	Millions of dollars	Per-cent
Under 500	1,084	1,022	13	49	334	.8	56.6	2.7
500 - 1,000	1,213	1,085	40	88	861	2.0	122.9	5.8
1,000-5,000	2,120	1,626	302	192	4,391	10.1	556.4	26.1
5,000-10,000	416	262	117	37	2,850	6.6	268.7	12.6
10,000-25,000	273	157	87	29	5,191	12.0	318.3	14.9
25,000-50,000	76	37	33	6	4,035	9.3	144.5	6.8
50,000-100,000	56	35	18	3	3,630	8.4	174.8	8.2
Over 100,000	52	20	23	9	22,029	50.8	488.6	22.9
Total	5,290	4,244	633	413	43,321	100.0	2,130.7	100.0

Source: See footnote to Table 2.

Continuing and Emerging Water Problems

Areas in which water problems are particularly severe are shown in the shaded portions of Map 2 prepared by the U. S. Geological Survey. Problems of rainfall variability and of floods are age-old.

Map 2



Construction of additional water storage facilities--ranging from the farm pond to the city reservoir and the multipurpose dam--can improve the efficiency of usage of the existing supply of fresh water. Pipelines and irrigation ditches can partially overcome the uneven distribution of existing supplies. Saline conversion of sea water and inland brackish water can expand the existing supply of water. Substantial amounts of water can be re-used with little loss. Population growth and rising industrial demands nonetheless will necessitate the use of a combination of methods and a continuing search for new methods to use the existing supply of water and to develop new sources of water. But effective water usage involves more than methods. It also involves a willingness on the part of governmental units--Federal, State, and local--to work together.

Federal Legislation and Action in Water Pollution Control and Desalination

Because of the national scope and enormous complexity of the problems of water supply and pollution control, the States, lacking adequate resources to do the required job in pollution control, have been looking increasingly to the Federal Government for financial assistance and technical services.

Within the Federal government the Army Corps of Engineers, the Bureau of Reclamation (Department of the Interior), the Soil Conservation Service (Department of Agriculture), the Tennessee Valley Authority, and the Federal Power Commission regulate the quantity of water through flood control and other means. The primary objective of Public Health Service programs is the development of comprehensive programs for the maintenance and improvement of water quality, through preventive as well as remedial measures.

The Water Pollution Control Act of 1948 (P.L. 80-845), a first Federal step in combating water pollution, formed the basis for the Water Pollution Control Act of 1956 (P.L. 84-660), which provided a broad basis for a national Federal-State cooperative program, including (a) grants to construct municipal waste treatment facilities, (b) grants to improve and strengthen State and interstate programs, (c) more workable Federal enforcement, and (d) more effective research.

The 1961 amendments to the Water Pollution Control Act (P.L. 87-88) established a Federal-State-local attack with greater capability of meeting water supply and pollution control problems. These amendments broadened and strengthened the Federal government's enforcement powers; provided the basis for a greatly stepped-up program of waste treatment works construction; authorized increased Federal support of State and interstate pollution control programs; provided for an intensified program of research looking toward more effective methods of pollution control, with special emphasis on regional variations; and established in law the principle of water quality control as a criterion in planning and building Federal reservoirs.

Comprehensive planning for water quality management--the most important activity specified under the Act--requires an inventory of the sources and effects of water pollution. Agreements on desired water use and quality are then developed. Pollution control measures are outlined to achieve the desired objectives, and a timetable is established for their accomplishment. Regional programs involve broad engineering, hydrologic, economic, legal and related studies together with field investigations--all carefully integrated with other water resource projects and proposals and sufficiently flexible to permit adjustments to changing economic growth patterns.

Under the provisions of P.L. 82-448 of 1952 and P.L. 85-883 of 1958, the Secretary of the Interior established the Office of Saline Water to develop conversion processes for sea water or other saline waters and to construct and operate five saline water conversion plants to demonstrate the engineering and economic potentials of conversion processes. In 1961

P.L. 87-295 authorized \$75 million for an expanded and accelerated program of basic and applied research through fiscal year 1967. The Department of the Interior is responsible for developing the necessary technology for the economical conversion of saline waters.

Three of the five demonstration plants authorized by Congress are already operative. These include one at Freeport, Texas, the first sea water conversion plant to regularly supply the needs of a U.S. municipality. This plant and the one at San Diego, California, of one million gallons per day capacity each, feature distillation processes. The Webster, South Dakota plant on the Northern Great Plains converts brackish water. The remaining two plants at Wrightsville Beach, North Carolina and Roswell, New Mexico are well under way and will be tested before the end of 1962.

Based on Office of Saline Water cost estimates, the three plants now under construction will produce fresh water at approximately \$1.00 to \$1.25 per thousand gallons. This price level is comparable to 5 to 10 cents per thousand gallons for treatment only for water from fresh water sources. Source development and distribution costs, averaging 25 to 30 cents per thousand gallons, must be added in both cases.

While we must continue to supplement our gross water supply by desalination of marine and brackish waters, by weather control, by evaporation reduction, and by other means yet to be developed, we must still look to used waters as the major source of water supply in the foreseeable future.

Measurement of Water Quality and Pollution Control

Realizing the need for continuing measures of water quality management through State, interstate, and other agencies, the U.S. Public Health Service in 1957 established the National Water Quality Network. By mid-1962 more than one-third (113) of the 300 sampling stations planned were operative on the Nation's waters (Map 3). Content analyses are made to determine the nature and extent of organisms, organic and inorganic chemicals, trace elements, and radioactivity in water samples. The resulting data will be useful in determining long-range water quality trends, in selecting sites for water uses and in developing comprehensive water resource programs.

A second rough indicator of water pollution initiated by the Public Health Service's Division of Water Supply and Pollution Control has been the "fish-kill" count based on data supplied by State conservation and fish and game agencies. From the beginning of the project in June 1960 through the end of 1961 a minimum of 21 million fish were reported killed in the rivers, streams, and lakes of 45 States. Their source of oxygen had been cut off by industrial wastes, mining operations, agricultural poisons, domestic sewage, and other imputed causes.

The Public Health Service has undertaken a Pesticide Control Project to determine the presence of herbicides and insecticides in surface streams and in ground waters and eventually to assay the effects of exposure of humans and aquatic life to long-term, low-level concentrations of these materials through the "food-chain mechanism." Investigations are currently underway in South Carolina, Florida, Alabama, and Louisiana.

The Federal government has completed an extensive inventory of its own facilities as the basis for developing an action program for control of water pollution on its premises. The Public Health Service in 1962 issued a series of 58 volumes, by State and by Federal government department, entitled Waste Water Disposal Practices at Federal Installations.

Map 3

PUBLIC HEALTH SERVICE
National Water Quality Network
SAMPLING STATIONS

June 30, 1962 - 113 Stations



Federal-State Action on Water Resources and Pollution Control

In cooperation with other Federal agencies, State and interstate water pollution control agencies, and with the municipalities and industries involved, comprehensive water pollution control programs are now being developed for six major river basins. These include: the Arkansas-Red, the Colorado and the Columbia Basins, the Great Lakes-Illinois River

Waterway Basins (which will require seven years and some \$12 million to complete), the Delaware River Basin, and the Chesapeake Bay and its tributaries. Under directive from the President, within the next ten years such planning will be under way or completed for all the river basins of the United States.

After years of negotiation, the Federal government and the legislatures of Delaware, New Jersey, New York, and Pennsylvania recently approved a five-way compact for the Delaware River Basin Program. The Federal government is a one-fifth partner but has veto power over projects involving Federal spending. The Delaware Commission will base its construction plans on a study made by the Army Corps of Engineers covering the 50-year period to 2010. The Corps has recommended authorization of eight major projects at an early date. Eleven of the 19 major dams and all 39 of the minor projects are expected to be completed by the year 2010. Provision will also be made for flood control, navigation, and recreation.

The Department of Health, Education, and Welfare in December 1961 agreed to join with the States of Washington and Michigan in two separate intrastate water pollution enforcement actions applying to United States waters and sources of pollution only. The two actions were the first to be taken under new provisions of the Federal Water Pollution Control Act, which permit the Secretary to invoke Federal enforcement procedures in intrastate waters when invited to do so by the State Governor. The procedure calls for a conference, which is followed, if necessary, by public hearings and action in the Federal courts.

Action by Industry in Controlling Water Pollution

Industry also is becoming more conscious of its responsibilities for controlling water pollution. While some industrial firms are responding to State anti-pollution requirements, others are acting voluntarily. Recycling the same water through the manufacturing process rather than discharging it into streams after one use is making pollution control more appealing to companies by actually cutting their water costs, particularly through the reduction of the volume of wastes to be treated.

In summary, age-old and increasing water problems will not be solved overnight. Several Federal government agencies are adapting existing techniques and developing new technology to provide for the needed quantities of water of adequate quality from fresh water, re-used water, and water converted from the sea or from brackish sources. The Federal government and the States have begun to work together in the search for solutions to regional water problems. Industry is also becoming aware of the desirability of providing for pollution control for economic as well as public health reasons.

Table 2

NEEDED MUNICIPAL SEWAGE TREATMENT WORKS

(Population in thousands; estimated cost in millions of dollars)

State or other area	Number of Projects			Population Served	Estimated Cost ^{1/}
	New Plants	Expansion	Additional Treatment		
TOTAL.....	4,241	633	413	43,321	2,130.7
UNITED STATES (50 States and D.C.)	4,221	633	411	43,213	2,118.0
Alabama.....	76	9	2	364	29.1
Alaska.....	25	*	*	101	11.1
Arizona.....	23	3	4	185	22.6
Arkansas.....	85	10	18	370	19.9
California.....	196	27	14	4,111	188.5
Colorado.....	39	11	25	1,028	17.0
Connecticut.....	32	11	8	770	49.4
Delaware.....	5	*	1	7	1.1
District of Columbia	*	*	*	*	43.1
Florida.....	157	9	12	1,272	72.5
Georgia.....	107	*	10	480	39.2
Hawaii.....	10	*	*	59	10.1
Idaho.....	91	1	6	95	8.4
Illinois.....	191	68	10	1,141	99.9
Indiana.....	55	22	9	900	49.9
Iowa.....	138	23	2	895	71.2
Kansas.....	85	25	*	485	23.3
Kentucky.....	77	7	5	220	29.5
Louisiana.....	301	11	8	1,399	42.6
Maine.....	50	1	*	278	29.5
Maryland.....	23	3	*	55	7.1
Massachusetts.....	46	5	*	2,235	65.7
Michigan.....	17	12	2	884	33.9
Minnesota.....	133	27	16	1,703	101.4
Mississippi.....	175	4	3	382	14.9
Missouri.....	462	20	4	5,172	112.9
Montana.....	51	2	1	135	7.0
Nebraska.....	85	4	12	319	24.2
Nevada.....	7	*	3	101	11.6
New Hampshire.....	58	11	*	293	42.6
New Jersey.....	20	16	3	358	36.5
New Mexico.....	30	7	3	160	10.4
New York.....	119	39	6	1,859	110.8
North Carolina.....	159	6	14	994	86.4
North Dakota.....	51	*	*	85	2.5
Ohio.....	55	26	6	866	49.8
Oklahoma.....	94	25	46	292	15.0
Oregon.....	78	8	15	335	36.1
Pennsylvania.....	158	3	1	789	74.9
Rhode Island.....	8	6	1	347	13.1
South Carolina.....	46	3	6	587	24.3
South Dakota.....	138	9	5	195	9.0
Tennessee.....	51	6	9	1,082	52.7
Texas.....	73	105	81	4,413	96.7
Utah.....	46	1	3	288	16.0
Vermont.....	22	*	*	88	8.3
Virginia.....	61	5	3	316	20.3
Washington.....	60	10	10	1,406	61.2
West Virginia.....	105	3	5	407	54.2
Wisconsin.....	43	29	18	2,882	59.4
Wyoming.....	4	*	1	23	1.1
Guam.....	19	*	*	67	6.8
Puerto Rico.....	*	*	2	28	3.5
Virgin Islands.....	4	*	*	13	2.4

Source: Second Annual Report on Municipal Waste Treatment Needs by the Committee on Sewage and Waste Disposal of the Conference of State Sanitary Engineers, in cooperation with the State Water Pollution Control Administrators and the U. S. Department of Health, Education, and Welfare; Public Health Service. ^{1/} Estimated Cost includes plant costs plus an allowance for interceptors and outfall sewers, which represent an investment of about 80 percent of plant cost.

CHRONIC CONDITIONS AND DISABILITY

Charles S. Wilder and Eugenia Sullivan

The U.S. National Health Survey classifies chronic conditions as illnesses and impairments which represent a departure from physical or mental well-being and which are of a type that persist for more than three months or for a long or indefinite duration. Examples of chronic conditions are heart disease and arthritis. Chronic conditions may be contrasted with "acute" conditions in which the duration of illness is generally less than three months. Examples of acute conditions are measles and influenza.

Chronic conditions often result in prolonged limitation of activity. The term "activity limitation" refers not only to inability to carry on the person's major activity (working, keeping house, or going to school) but also to lesser limitation unrelated to major activity.

There are 74 million persons in the United States with one or more chronic conditions. Of this number, 19 million--one out of four chronically ill persons--are limited to some extent in their activities owing to chronic disease or impairment.

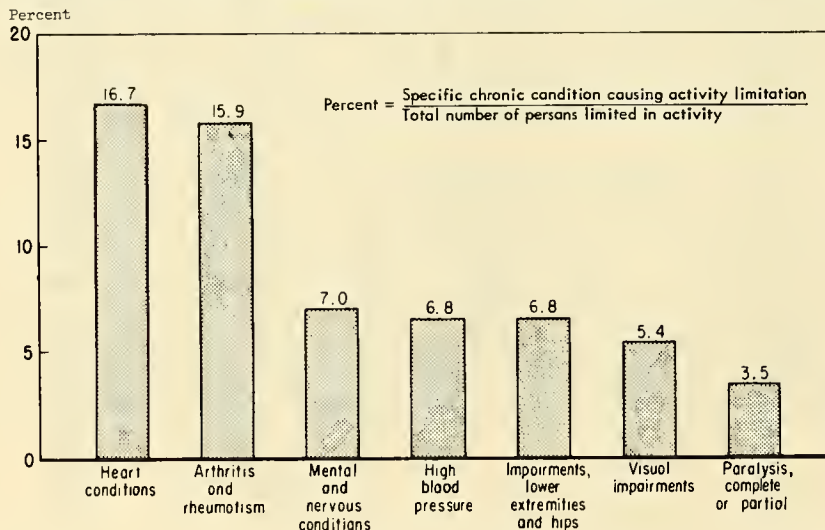
Leading Causes of Chronic Disability

About one out of three persons who were limited in their activities due to chronic conditions reported heart disease, arthritis, or rheumatism as the cause. Heart conditions, the leading cause of activity limitation, were reported to have caused about 17 percent of all activity limitation; the second leading cause, arthritis and rheumatism, accounted for about 16 percent of the total.

Mental and nervous conditions, high blood pressure, impairments of the back or spine, and impairments of the lower extremities and hips each accounted for about 7 percent of the reported activity limitation.

Chart 1

Selected Chronic Conditions Causing Limitation of Activity



Mr. Wilder is a Survey Statistician with the National Center for Health Statistics, Public Health Service; and Miss Sullivan is a Staff Assistant in the Office of Program Analysis, Office of the Assistant Secretary (for Legislation), U. S. Department of Health, Education, and Welfare. Summarizes data from "Chronic Conditions Causing Limitations of Activities," Health Statistics, PHS Pub. No. 584-B36, October 1962, based on 76,000 household interviews of the civilian non-institutional population during the 24-month period from July 1959 through June 1961.

Many Chronically Ill Persons are Limited in Major Activity

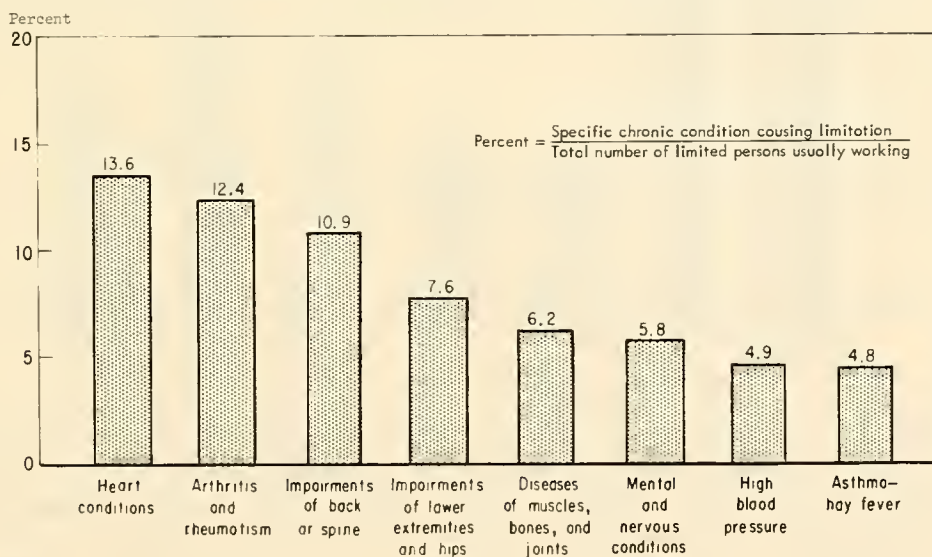
About 14 million persons had chronic limitations affecting their major activity. About 2.6 million (18 percent) reported heart conditions as the cause, and 2.4 million (17 percent) reported arthritis or rheumatism. More males than females reported that they were limited in their major activity due to chronic conditions. This was true for each of the three age groups--under 45, 45-64, and 65 and over.

About four million persons in the United States are so disabled by chronic illness or impairment that they are unable to carry on their major activity. Approximately one-fourth of these persons reported heart conditions as the cause of their disability. Arthritis and rheumatism and visual impairments ranked second and third as causes of inability to work, keep house, or go to school; 16 percent of the persons unable to carry on their major activity reported arthritis or rheumatism as the cause and 11 percent reported visual impairments.

Chronic Conditions Affect One-half of the Working Population

Some 30.7 million usually working persons--or about 50 percent of the working population--reported that they had one or more chronic conditions. About 4 million, or six percent of the usually working persons, were limited in their major activity or unable to carry on their major activity because of a chronic condition. The three leading causes of chronic limitation affecting ability to work among usually working people, heart conditions, arthritis and rheumatism, and impairments of the back or spine, accounted for 14 percent, 12 percent, and 11 percent, respectively.

Chart 2
Selected Chronic Conditions Affecting Ability to Work



Among women keeping house, 22 million, or 61 percent, reported one or more chronic conditions. Of the total number of women keeping house, about 12

percent were limited in their ability to keep house or were unable to do so because of the chronic condition. Nearly one out of four women reporting such limitation named arthritis or rheumatism as the cause.

Among the approximately 540,000 preschool and school-age children reported to have chronic conditions causing major limitations, 13 percent had asthma-hay fever; 11 percent complete or partial paralysis; and 6 percent, impairments (except paralysis and absence) of the lower extremities and hips.

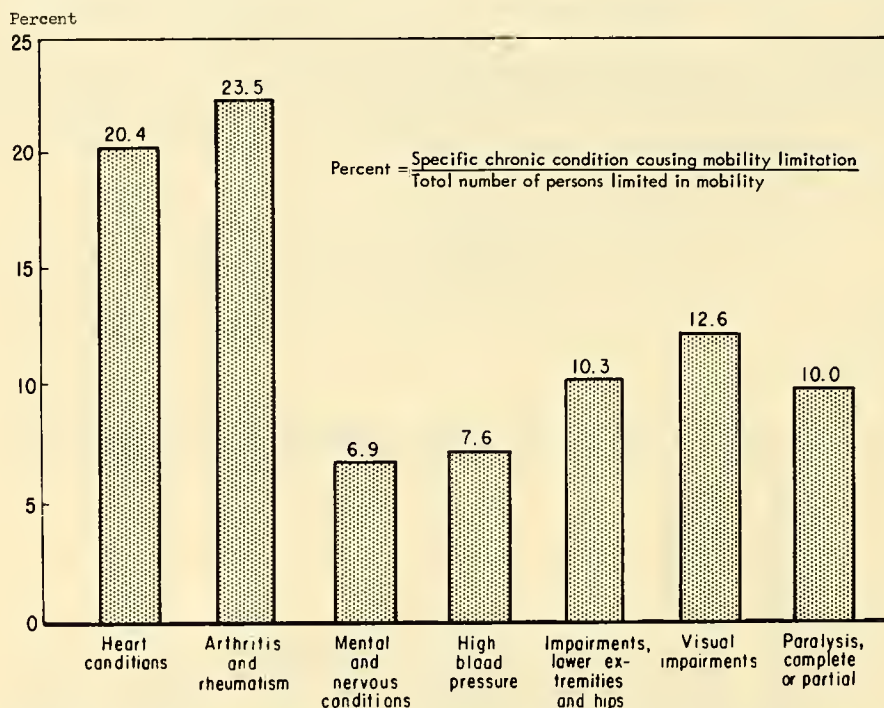
Chronic Conditions May Result in Limitation of Mobility

About 4.8 million persons with chronic conditions are limited in their mobility--that is, their ability to move about freely is restricted to some degree as a result of chronic conditions.

Arthritis and rheumatism caused limitation of mobility for approximately 1.1 million persons--about one out of four persons with such limitation. Heart conditions were reported by about 20 percent of those who were limited in their mobility due to chronic illness, visual impairments by 13 percent, and paralysis by 10 percent.

Chart 3

Selected Chronic Conditions Causing Limitation of Mobility



Although a high proportion of mobility limitation is associated with arthritis and rheumatism, these conditions are more likely to cause a person to have difficulty in getting around than to confine him to the house. Heart disease and paralysis, on the other hand, are associated with a higher occurrence of house confinement. Among persons limited in their mobility because of arthritis or rheumatism, about one out of seven was confined to the house; the ratio for persons with heart disease was about one out of five, and for paralysis one out of three.

Chronic Disability Increases with Age

The incidence of chronic illness increases steadily with age--from 45 percent for the age group 17-44 to 61 percent for the age group 45-64, and up to 79 percent for the 65 and over group (See Table).

Likewise, disability associated with chronic illness occurs more frequently among older people. Limitation in amount or kind of major activity among chronically ill persons increases from 9 percent for the age group 17-44 years to 17 percent and 29 percent, respectively, for the 45-64 and over-65 age groups. Inability to carry on major activity increases from 1.5 percent to 4.7 percent and 19.7 percent for the three age groups; and limitation of mobility increases from about 2 percent to 6 percent and 23 percent.

As age increases certain disease groups assume a relatively increased importance as caused of chronic disability. In particular, heart disease, high blood pressure, arthritis and rheumatism, and visual impairments are likely to increase in severity, as well as prevalence, among older persons. Among persons aged 65 and over, heart conditions, arthritis or rheumatism and visual impairments were reported as causing respectively about 24, 23, and 10 percent of the limitations. Among persons under 45 years of age, these three condition groups were reported to have caused 6, 5, and 3 percent respectively, of the total number of limitations.

Limitation of Activity and Mobility Due to Chronic Conditions
July 1959 - June 1961

Category	Age Group									
	Average Number (in thousands)					Percent Distribution				
	All Ages	Under 17	17-44	45-64	65 and Over	All Ages	Under 17	17-44	45-64	65 and Over
Total Population	176,302	61,911	63,068	35,989	15,334	100.0	100.0	100.0	100.0	100.0
Persons with no chronic conditions	102,453	50,795	34,473	13,921	3,265	58.1	82.0	54.7	38.7	21.3
Persons with one or more chronic conditions	73,849	11,116	28,596	22,068	12,070	41.9	18.0	45.3	61.3	78.7
Limiting Activity:	19,273	1,120	4,652	6,593	6,908	10.9	1.8	7.4	18.3	45.1
Other than major activity ^{1/}	5,056	580	1,630	1,803	1,043	2.9	0.9	2.6	5.0	6.8
Amount or kind of major activity ^{1/}	10,243	407	2,600	3,745	3,491	5.8	0.7	4.1	10.4	22.8
Unable to carry on major activity ^{1/}	3,974	133	422	1,045	2,374	2.3	0.2	0.7	2.9	15.5
Limiting Mobility:	4,766	199	509	1,331	2,726	2.7	0.3	0.8	3.7	17.8
Having trouble getting around alone	2,843	77	327	915	1,523	1.6	0.1	0.5	2.5	9.9
Unable to get around alone	1,008	72	97	220	619	0.6	0.1	0.2	0.6	4.0
Confined to house	915	50	85	196	584	0.5	0.1	0.1	0.5	3.8

^{1/} Major activity refers to ability to work, keep house, or go to school.

MENTAL RETARDATION

Luther W. Stringham

Mental retardation is a condition, characterized by the faulty development of intelligence, which impairs an individual's ability to learn and to adapt to the demands of society.

The failure of intelligence to develop normally may be due to diseases or conditions--occurring before or at the time of birth, or in infancy or childhood--that damage the brain. It may also be due to factors determined by heredity that affect the development of the brain. It is sometimes accentuated by home or social conditions which fail to provide the child with adequate stimulation or opportunities for learning.

Degrees of Retardation

The degree of retardation varies greatly among individuals. It can be so severe that the afflicted person must have protective care throughout his life. In others the retardation is so mild that many tasks can be learned and a measure of independence in everyday life can be achieved. In a substantial number of cases the affected persons can adjust in a limited way to the demands of society, and in many instances can, with help, become productive members of the labor force.

There is no fully satisfactory way of characterizing the degrees of retardation. They range, according to one classification, from profound to mild, and are related to intelligence quotient (I.Q.), developmental characteristics, potential for education and training, and social and vocational adequacy as shown in the following table:

Mr. Stringham is the Director, Office of Program Analysis, Office of the Assistant Secretary (for Legislation) and Chairman of the Department's Committee on Mental Retardation. This article was prepared with assistance from members of the Secretary's Committee on Mental Retardation and the staff of the President's Panel on Mental Retardation. Additional information is included in Mental Retardation Activities of the U. S. Department of Health, Education, and Welfare, (May 1962), U. S. Government Printing Office, Washington 25, D. C.

Health, Education, and Welfare Indicators, June 1962

Developmental Characteristics of the Mentally Retarded

Degrees of Mental Re- tardation	Pre-School Age 0 - 5 Maturation and Development	School Age 6 - 20 Training and Education	Adult 21 and over Social and Vocational Capabilities
<u>Profound</u> (I.Q. below 20)	Gross retardation; minimal capacity for functioning in sensorimotor areas; needs nursing care.	Some motor development present; cannot profit from training in self- help; needs total care.	Some motor and speech development; totally incapable of self- maintenance; needs complete care and supervision.
<u>Severe</u> (I.Q. 20-35)	Poor motor develop- ment; speech is mini- mal; generally unable to profit from train- ing in self-help; little or no communi- cation skills.	Can talk or learn to communicate; can be trained in elemental health habits; cannot learn functional ac- ademic skills; profits from systematic habit training.	Can contribute par- tially to self- support under com- plete supervision; can develop self- protection skills to a minimal useful level in controlled environment.
<u>Moderate</u> (I.Q. 36-52)	Can talk or learn to communicate; poor social awareness; fair motor develop- ment; may profit from self-help; can be managed with moderate supervision.	Can learn functional academic skills to approximately 4th grade level by late teens if given special education.	Capable of self- maintenance in un- skilled or semi- skilled occupations; needs supervision and guidance when under mild social or economic stress.
<u>Mild</u> (I.Q. 53-68)	Can develop social and communication skills; minimal re- tardation in sensori- motor areas; rarely distinguished from normal until later age.	Can learn academic skills to approxi- mately 6th grade level by late teens. Cannot learn general high school subjects. Needs special educa- tion particularly at secondary school age levels.	Capable of social and vocational adequacy with proper education and training. Fre- quently needs super- vision and guidance under serious social or economic stress.

Another classification, used in relation to educational programs, makes use of a three-way division as follows:

<u>Level</u>	<u>Intelligence Quotient</u>
I. Custodial	Below 25
II. Trainable	About 25-50
III. Educable	About 50-75

Other classifications group the retarded in somewhat different ways and make use of other terminology. Nevertheless, all of them recognize gradations of mental retardation, although the exact boundary lines vary. Regardless of the particular classification used, however, it should be understood that seldom, if ever, is I.Q. the only determining factor in mental retardation. Other factors that affect intellectual competency are emotional control and social adaptability.

The Causes of Mental Retardation

Based on present knowledge the causal factors in mental retardation may be divided into two broad categories: (1) mental retardation caused by incompletely understood psychological, environmental, or genetic factors without any evident damage of the brain; and (2) mental retardation caused by a number of specifically identified conditions or diseases. The causal and contributing factors included in each of these categories are as follows:

1. Mental retardation caused by incompletely understood psychological, environmental, or genetic factors without any evident damage of the brain.

This group contains 75 to 85 percent of those diagnosed as retarded. It consists of individuals who show no demonstrable gross abnormality of the brain and who, by and large, are persons with relatively mild degrees of retardation. In general, the prevalence of this type of retardation is greater within the less favored socioeconomic groups within our culture.

A variety of factors may be operating within this large category. It is believed that some members of this group are products of very complex mechanisms of heredity, reflecting the fact that human beings show genetic variability in any characteristic, including measured intelligence. Environmental factors such as the psychological circumstances of life, social interaction patterns, and the richness of the environment with respect to intellectual stimulation play an important definitive or contributory role within this group. Finally, a variety of unfavorable health factors--including maternal health and prenatal care, nutrition, the conditions of birth, and other illnesses or injuries which may produce minimal and undemonstrable brain damage--probably contribute to a lower level of performance in many cases.

The total effect, thus, is a complex one, involving the action or the interaction of genetic factors, psychological experiences, and environmental influences. At the present time, it is impossible to assign clear weights to each of these general causative factors. It is known that all of them, however, operate more strongly in the underprivileged groups than among those more favorably situated in society. The prospects for prevention and amelioration should not be discouraging, however, since many of the environmental and psychological variables are subject to control, opening up the possibility of preventing some of the retardation, especially of milder degree, based upon this class of causation. Some of these conditions are preventable if treatment can be instituted early enough in the child's life. Most of the remainder can be ameliorated through a combination of resources, medicine, social work, education, and rehabilitation.

It should be very clearly stated that these same factors also affect retarded individuals whose difficulty stems from the more specific etiologies enumerated in category 2 below.

2. Mental retardation caused by specifically identified conditions or diseases in which there is demonstrable brain damage.

In approximately 15 to 25 percent of diagnosed cases of mental retardation, a specific disease entity can be held responsible. The impact of such diseases can be most readily demonstrated in those instances where there has been gross brain damage and where the degree of retardation is severe. As mentioned above, it is uncertain to what extent these "organic" factors may operate to produce minor impairment among the less severely retarded groups. Such "organic" factors fall within seven general classes:

a. Diseases due to infections in the mother during pregnancy or in the infant after birth. German measles, occurring during the first three months of pregnancy, is known to result in mental retardation as well as other abnormalities. Other infections occurring during pregnancy have also been implicated. A number of the infectious diseases of infancy and childhood may cause brain injury resulting in retardation.

b. Brain damage resulting from toxic agents which are ingested by the mother during pregnancy or by the child after birth. Jaundice of the newborn due to Rh blood factor incompatibility and carbon monoxide or lead poisoning are examples.

c. Diseases due to trauma or physical agent. Brain injury occurring as a result of difficult delivery and asphyxiation due to delay in the onset of breathing at the time of birth are common causes. They occur with particular frequency in premature babies. Brain injury in childhood, especially from automobile accidents, is an added factor.

d. Diseases due to disorders of metabolism, growth or nutrition. A number of disorders of metabolism, some of which are determined by heredity, produce mental retardation. Some of the most important of these disorders are phenylketonuria and galactosemia in which there are abnormalities of amino acid chemistry in the body.

e. Abnormal growths within the brain. A number of rare conditions, some determined by heredity, are characterized by tumor-like and other abnormal growths within the brain and produce mental retardation.

f. Diseases due to unknown prenatal factors. Recent discoveries prove that mongolism results from abnormal grouping of chromosomes probably at the time of formation of the ovum in the mother. Other congenital malformations have a similar basis. For some, however, an undetermined prenatal mechanism must be responsible.

g. Diseases due to uncertain causes but with evident damage of the brain. A sizable group of mentally retarded children have evident damage to the brain which is presumed to be linked to the mental retardation. The causes of the pathology of the brain in this sizable group remains unknown.

Data on patients in institutions show a higher prevalence of pathological conditions among the more severely retarded. Retarded children have other defects more often than the average child. They are often smaller than average, and have poorer muscular coordination. They have a greater than ordinary percentage of defects, such as hearing and vision, and have probably greater difficulty in perceiving what the sense organs bring to their minds. Thus many of them are multihandicapped in some degree.

Scope of the Problem

As stated above, mental retardation is defined as impairment of ability to learn and to adapt to the demands of society. These demands are not the same in every culture. In fact, even within our own community they vary with the age of the individual. We expect little, in terms of intellectual pursuits, from the preschool child. During the school age, the individual is evaluated very critically in terms of social and academic accomplishment. In later life, the intellectual basis of social inadequacy again may be less evident. Numerous surveys directed toward determining the frequency and magnitude of the problem of mental retardation have shown that the number of individuals reported as retarded is highest during the school age. Less than one-fifth as many children in the age group 0-4 were reported by these surveys as mentally retarded as were reported in the age group 10-14. Similarly, only one-fourth as many persons in the age group 20 and over were identified as mentally retarded as compared with the number identified in the age group 10-14.

This varying prevalence by age is to some extent determined by differential survival rates and other demographic factors. However, the very high prevalence at ages 10 to 14 is due primarily to the increased recognition of intellectual handicap of children within the school systems. The very low number of infants from 0 to 1 year old identified as retarded is in part at least due to the fact that their intellectual deficiency is not yet apparent. Only gross impairment is evident in early childhood. Of striking significance is the fact that half of the individuals considered retarded during adolescence are no longer so considered in adulthood.

In view of these considerations, only the most crude estimates of the overall magnitude of the problem can be established. One such estimate may be derived through the use of intelligence quotients, and obtained from the samples upon which our intelligence tests have been standardized. The numbers of mentally retarded persons by this criterion can be calculated roughly on the basis of this experience with intelligence testing. On most tests standardized nationally, experience has shown that virtually all persons with I.Q.s below about 70 have significant difficulties in adapting adequately to their environment. About 3 percent of the population score below this level.

Based on this figure of 3 percent, it is estimated that, of the 4.2 million children born each year, 126,000 are, or will be, classed as mentally retarded.

Of the 126,000, some 4,200 (0.1 percent of all births) will be retarded so profoundly or severely that they will be unable to care even for their own creature needs. About 12,600 (0.3 percent of all births) will suffer from "moderate" retardation--they will remain below the 7-year intellectual level. The remaining 110,000 (2.6 percent of births) are those with mild retardation and represent those who can, with special training and assistance, acquire limited job skills and achieve almost complete independence in community living.

Applying these same percentages to the total population it is estimated that there are approximately 5.4 million mentally retarded persons in the population. Of this number:

- 60,000 to 90,000 are persons, mostly children and adolescents, so profoundly or severely retarded that they cannot survive unless constantly cared for and sheltered.

- 300,000 to 350,000 are moderately retarded children, adolescents, and adults who can assist in their own care and can even undertake semi-productive endeavors in a protected environment. They can understand the meaning of danger. However, they have limited capacity to learn, and their shortcomings become evident when they are called upon to understand the meaning of symbols as used in the written language. These people can learn many tasks when patiently and properly taught.

• Some 5,000,000 are mildly retarded children, adolescents, and adults who are able to perform more adequately, adjust in a limited way to the demands of society, and play a more positive role as workers.

Economic Costs of Mental Retardation

There are no reliable estimates of the total cost to the Nation, both direct and indirect, of mental retardation. The direct costs to families and to communities include those for institutional and home care and for special services. Indirect costs include the losses that result from the absence of earning capacity and inability to contribute to the production of goods and services.

Only 4 percent of the mentally retarded are confined to institutions. Yet, their care costs relatives and communities some \$300 million annually. Additional amounts are required for the construction of facilities for custodial and educational purposes. The cost of institutional care, facilities construction, and special care in the family home totals more than \$1 billion per year.

The Development of National Concern

Mental retardation thus is a serious problem affecting many aspects of our society. The host of problems presented by these people--to themselves, to their families, and to their communities--include biological, psychological, educational, vocational, and social areas of concern. Mental retardation must be approached through the whole life cycle, from consideration of genetics and conception through pregnancy, delivery, childhood, adolescence, adulthood, and old age.

Since 1950, interest in the problem of mental retardation has grown very rapidly. During the past decade increased activities have been stimulated by a few foundations, by the demands of parents, by interested lay and professional groups, and by members of legislative bodies who have been convinced of the urgent need for programs in this field.

Today, private efforts and public programs at all levels of government--local, State, and Federal--take eight basic forms:

1. Diagnostic and clinical services. There are over 90 clinics specializing in services to the retarded. Well over half were established within the past five years. These services need still greater expansion. The 20,000 children aided in 1960 represent only a small fraction of those who need the service.

2. Care in residential institutions. Today there are over 200,000 mentally retarded patients in such institutions, approximately 10 percent more than there were five years ago. But the average

waiting list continues to grow, and the quality of the service often suffers from limited budgets and salary levels. Increases in both facilities and manpower are necessary.

3. Special education. The number of mentally retarded enrolled in special educational classes has been doubled over the past decade. In spite of this record, we are not yet meeting our existing requirements, and more such facilities must be provided. Less than 25 percent of our retarded children have access to special education. Moreover, the classes need teachers specially trained to meet the specialized needs of the retarded. To meet minimum standards, at least 75,000 such teachers are required. Today there are less than 20,000, and many of these have not fully met professional standards.

4. Parent counselling. Counselling of parents is now being provided by private physicians, clinic staffs, social workers, nurses, psychologists, and school personnel. Although this service is still in an experimental stage of development, it offers bright prospects for helping parents to meet their social and emotional problems.

5. Social services. Social services provided mentally retarded children and adults include case work, group work, and day care. These services are an integral part of clinical, rehabilitation, and other mental retardation programs. Social workers are also active in community organizations and in working with parents groups.

6. Vocational rehabilitation. In the past five years the number of mentally retarded rehabilitated through State vocational agencies has more than tripled--going from 1,094 in 1957 to 3,562 in 1961. In terms of the number who could benefit from rehabilitation services, this number is very small. However, new knowledge and new techniques are needed, for over 25 percent of those coming out of the special classes still cannot be placed.

7. Preparation of professional personnel. The Federal government is now promoting the training of leadership personnel in education, rehabilitation workers, research personnel, and medical and welfare specialists. In addition, programs are being provided that will increase the competence of the health professions in providing services for retarded persons. Nevertheless, shortages of qualified personnel remain one of the major bottlenecks in providing services to retarded persons and their families.

8. Research. Support for research in the causes and amelioration of mental retardation has been greatly increased, especially during the last five years. Progress has been made in identifying specific conditions and diseases and in establishing basic problems of behavior and learning, but major research breakthroughs must be achieved before there will be adequate understanding of the pathological, genetic, psychological, environmental, and other aspects of mental retardation.

Programs of the Federal Government

Primary responsibility within the Federal government for activities relating to mental retardation is located in the Department of Health, Education, and Welfare. Within the Department these programs are administered by four operating agencies--the Public Health Service, Office of Education, Social Security Administration, and Office of Vocational Rehabilitation--and may be grouped under four main categories: (1) research and studies; (2) professional preparation; (3) services; and (4) construction of a limited number of facilities that qualify for assistance under the hospital and medical facilities construction (Hill-Burton) program.

Research activities include (1) the intramural and extramural support programs of the National Institute of Mental Health, the National Institute of Neurological Diseases and Blindness, and the Center for Research in Child Health of the Public Health Service; (2) the Office of Education programs of studies, surveys, and cooperative research; (3) special project grants under the maternal and child health program of the Children's Bureau, Social Security Administration; and (4) the research and demonstration projects of the Office of Vocational Rehabilitation.

Professional preparation is supported through (1) Office of Vocational Rehabilitation grants to educational institutions for training of personnel for all phases of rehabilitation; (2) teaching and training grants of the National Institutes of Health; (3) intramural training programs of the Public Health Service; and (4) Office of Education training grants to colleges and universities and State educational agencies for leadership positions in the education of the mentally retarded.

Services include consultation and technical assistance in their respective areas of competence by (1) the Children's Bureau, under the maternal and child health and the child welfare services programs; (2) Office of Vocational Rehabilitation to State rehabilitation agencies; (3) the National Institute of Mental Health through its regional office staffs; and (4) the Office of Education to State and local school systems, educational personnel and voluntary groups. In addition, financial assistance to States is provided under the Federal-State programs of public assistance, and benefit payments for the disabled are made under the Federal program of old-age, survivors, and disability insurance.

In the 1963 fiscal year the Department of Health, Education, and Welfare anticipates expenditures in excess of \$28 million from general funds for research, training, and services in the field of mental retardation. This total represents an increase of \$4.3 million over the estimated level of funds available for this purpose for fiscal year 1962 and more than doubles the \$12.4 million spent by the Department five years ago. In addition, it is estimated that over \$63 million will be

paid from the old-age, survivors, and disability insurance trust funds to persons with diagnosed mental deficiency--primarily adults who have had disabilities from childhood.

Mental Retardation and the Future

The acceleration of effort--private and public--already has produced some encouraging results. Progress has been made in identifying specific disorders and their treatment, in training personnel, in providing additional facilities, and in improving services generally. Special education classes have multiplied. More rehabilitations have been completed. Parents get better counseling.

Even though such progress is gratifying, mental retardation will continue to be a problem of national concern. Unless there are major advances in methods of prevention, there will be as many as one million more mentally retarded persons by 1970.

Improved and more extensive prenatal, obstetrical and pediatric care have brought about marked increases in the infant survival rate in the Nation over the past 20 years. Such efforts, along with increasing the chances of survival of all infants, have also increased the survival rates of infants who are premature or who have congenital handicaps or malformations. Since mental retardation is one of the major conditions associated with such handicaps in infants, improved care has to an extent also increased the number of the retarded for whom special services will be needed.

Disease control, new drugs, and higher standards of living have steadily increased the life span of most Americans. While the mentally retarded as a group fall below the average life expectancy, the number of years the average retarded individual lives has been increasing proportionately with the overall average. This increase in life span adds materially to the number of mentally retarded persons, particularly in the upper age levels. With the increased availability of health services, the life span of mentally retarded persons may continue to increase and move closer to the average life expectancy of the general population.

The increased survival rates of retarded infants will probably bring with it an increase in the number of retarded persons who have associated physical handicaps. Current reports from clinical programs dealing with retarded children under 6 years of age indicate that even now in this group, 75 percent have associated physical disabilities. Likewise, because the older individuals are now living longer, we can expect many of them to present the physical problems of the aged in the general population.

Because of changing social and economic conditions, some of the problems of mentally retarded persons will become more acute in the future:

1. Families are growing larger and in fewer instances will a retarded child be an only child.

2. More mothers of young children are in the labor force. Many times the factors that induce mothers to work are even more forceful for the mother who has a retarded child. Substitute care for the retarded child, however, is more difficult to obtain. Frequently, too, the retarded child is less able to understand the need for a parent substitute, which makes planning more difficult to carry out.

3. More children are going to school longer. The general level of education is rising in the Nation. As this trend continues, the mentally retarded whose disability shows itself in this area will be more marked. As educational standards and achievements continue to rise, a greater number of individuals who cannot keep up or achieve these levels will be discovered and will demand attention.

4. Machines replace unskilled labor. In the past, the majority of the mentally retarded children completing special classes for the educable in urban areas were able to find jobs on their own. There is some question whether this will continue to be so in the next 10 years without additional special help. Increased industrial specialization, automation and the intensified tempo of industrial production, pose new problems. Elevated educational standards in rural areas also are adding to the problem. Farming, which years ago provided a field of employment for many of the retarded, has become so highly specialized that persons who would have been employed in the past have a difficult time finding employment at all now.

The President's Panel on Mental Retardation

Thus the problem of mental retardation presents a major challenge to society: to find causes, to seek prevention, and to provide the best possible assurance for lives of maximum usefulness. Manifestly, the needs remain great for more knowledge, more personnel, more facilities, and more services.

In October, 1961, President Kennedy appointed a panel of physicians, scientists, educators, lawyers, psychologists, social scientists and other leaders to review present programs and needs, to ascertain gaps, and to prescribe a program of action. The President has asked the Panel to formulate a national plan to combat mental retardation and to report to him on or before December 31, 1962. The Panel's recommendations will provide the guidelines for future efforts and further progress in the years to come.

REPORT OF THE PRESIDENT'S PANEL ON MENTAL RETARDATION

Leonard W. Mayo

President Kennedy appointed the Panel on Mental Retardation in October, 1961, with the mandate to prepare a national plan to help meet the many ramifications of this complex problem. In October, 1962, the Panel presented its report, which was subsequently published early in 1963.

The 200-page document includes over 90 recommendations. Mental retardation is shown to be a major national health, social and economic problem affecting some 5.4 million children and adults and involving some 15 to 20 million family members in this country. It estimates the cost of care for those affected at approximately \$550 million a year, plus a loss to the Nation of several billion dollars of economic output.

In carrying out its mandate, the Panel employed four main methods of study and inquiry:

- Task forces on specific subjects were appointed to which all members were assigned and advisors were designated to work closely with them.
- Public hearings were held in seven major cities, at which public officials concerned with retardation, teachers, representatives of related professions, parents, and others reported on local and state programs and gaps in service and made recommendations.
- Panel members and advisors visited England, Sweden, Denmark, Holland, and the Soviet Union to study methods of care and education of the retarded and to become acquainted with research in those countries.
- A considerable body of literature and recent studies were reviewed, and Panel members visited and observed facilities and programs for the retarded in several states.

Highlights of the findings and recommendations in each of the main sections of the report are summarized herewith, with liberal quotations from the text.

Mr. Mayo was the Chairman of the President's Panel on Mental Retardation. See also the author's "Report" for the National Rehabilitation Association's Journal of Rehabilitation, Nov.-Dec. 1962. Mr. Rudolf P. Hormuth, Specialist in Service for Mentally Retarded Children, Children's Bureau, prepared "Highlights" from the report for the Jan.-Feb. 1963 issue of Children (reprints available). The report itself, A Report of the President's Panel on a Proposed Program for National Action to Combat Mental Retardation, may be purchased from the U. S. Government Printing Office, Washington 25, D. C., at 65 cents. Some of the basic facts relating to the size of the problem, causal factors, and necessary service are contained in "Mental Retardation" in the June 1962 issue of Indicators (reprints available).

Research

In research, the Panel recommends that:

- Ten research centers affiliated with universities be established to insure continuing progress in research relevant to mental retardation in both the behavioral and biological sciences and to provide additional facilities for training research personnel.

- Biological and behavioral research as presently conducted by individual investigators interested in problems germane to mental retardation be continued and extended.

- Population studies be undertaken as a basis for analyses of the characteristics and needs of the mentally retarded population on a national basis.

- Governmental activity in developing plans for storage, retrieval, and distribution of scientific data be continued.

- Congress provide funds to improve the serious shortage of laboratory space; private foundations are requested to review their policies and to consider grants designed to help alleviate this problem.

- Scientists in both the biological and behavioral groups engage in highly specialized conferences to deal in depth with problems underlying retardation.

- A Federal Institute of Learning be established under the general auspices of the Department of Health, Education, and Welfare (HEW).

- The research budget for exceptional children in the U.S. Office of Education be augmented in accordance with the provisions of legislation proposed in 1962.

- The National Institutes of Health and private foundations provide more post-doctoral fellowships, awards, and research and career professorships in fields relevant to retardation.

- Programs to train research educators, sociologists, and psychologists in mental retardation be initiated.

- Federal support be undertaken for a national program of scholarships for undergraduate college students possessing exceptional scientific ability and for the extension of research activities in undergraduate science departments.

- An extensive program of federal aid to education be designed to prevent loss to the scientific manpower pool of numbers of gifted youths who fail to enter college for financial reasons.

- The graduate fellowship program in the U.S. Office of Education be extended to provide for preparing research specialists in the education of the mentally retarded.

Prevention

To develop a program to prevent mental retardation, the Panel proposes that:

- All possible federal, state, and local resources be mobilized to provide maternal and infant care in areas where prematurity rates are high and the consequent hazards to infants great.
- High priority be given to making adequate maternal care accessible to the most vulnerable groups in our society, i.e., those who live in seriously deprived areas and who receive little or no medical care before, during, or after pregnancy, and that funds be substantially increased under Title V, Part 1, of the Social Security Act (Maternal and Child Health), to provide for such care.
- State departments of health and university medical centers collaborate in the development of multi-state genetic counseling services in order to give young married couples and expectant parents access to such consultation, and that diagnostic laboratories for complex procedures (related to prevention) be developed.
- The present review of drug testing procedures be endorsed and the current policy with respect to the distribution of drugs to physicians for field trials without adequate criteria or preparation be investigated.
- Laws and/or regulations be enacted by all states (as they have by some) to provide for the registration, inspection, calibration, and licensing of X-ray and fluoroscopic machines and other ionizing radiation sources; and that lifetime radiation records be developed on a demonstration basis in selected areas for the recording and dating of diagnostic and therapeutic X-ray exposure.
- Hospitals adopt every known procedure to ensure the prevention of prenatal and neonatal defect and brain damage, and that they apply modern child-rearing knowledge and practices in dealing with infants who may have suffered from trauma resulting from maternal separation.
- Programs keyed to the needs of culturally deprived groups in specific areas be organized to reduce the impact of deprivation, which seriously affects the development of children's learning ability. State departments of health, education, and welfare are asked to join in promoting local community programs of prevention to offset the adverse effects of destructive community and neighborhood environment.
- A domestic Peace Corps be established to help meet the personnel shortage and special needs in deprived areas and to give Americans an opportunity to serve their own and other communities effectively.

Clinical and Medical Services

In this area, the Panel recommends that:

- Inclusive programs of clinical services and medical care be made available to the retarded in or close to the communities where they reside. State and local health departments are urged to extend their services to children in the lower socioeconomic groups and to utilize procedures for the early detection of abnormalities.

- Every related agency in the community include the mentally retarded and their families among those served.

- State governments lift all present restrictions preventing retarded children with physical handicaps from receiving services available to all other physically handicapped children in the state crippled children's program; to make this possible, an increase of federal funds to the crippled children's program (Title V, Part 2, Social Security Act) earmarked for the mentally retarded is recommended.

- Additional clinics for the retarded be established wherever needed to provide services for additional patients and opportunities for training personnel.

- To plan these program services more effectively, it is essential that adequately staffed biostatistical sections at the state and federal levels be developed; that there be improved record-keeping and data processing systems; and that community and epidemiological studies be designed and carried out.

Education

The Panel recommends that specialized educational services be extended and improved to provide appropriate educational opportunities for all retarded children.

This assistance, the report states, can be provided through a federal Extension and Improvement (E & I) program, administered to assure the use of available funds for expansion or development of new services rather than for existing programs at current levels. Any proposal to extend or improve special educational services for retarded children should be considered for an E & I grant, and evaluated on a competitive basis. Universities, state departments of public education, local and county school systems, and other educational agencies should all be eligible to submit such applications.

At present, states usually assist local school systems by reimbursing local districts for a portion of the excess cost of providing special education services; however, the amount available for this purpose in the budget of the state departments of public instruction is usually limited. Any substantial extension of the specialized educational services for retarded children will require assistance and stimulation from sources beyond local and state school systems.

It is essential that adequate opportunities for learning intellectual and social skills be provided such children through formal pre-school education programs designed to facilitate adequate development of skills such as speech and language, abstract reasoning, problem solving, etc., and to effect desirable patterns of motivation and social values.

Most retarded children live in city slums or depressed rural environments. Research suggests that deprivation of adequate opportunities for learning contributes to and complicates the degree of mental retardation present in these children. Formal pre-school programs of increased learning opportunities may accelerate development of these children. Yet there are exceedingly few such programs now available to enrich the experiences of deprived pre-school children.

The Panel suggests that instructional materials centers be established in the special education units of state departments of public instruction or in university departments of education, to provide teachers and other education personnel with competent consultation on instructional materials and to distribute and loan such materials for the mentally retarded.

The Panel strongly recommends that specialized classroom services be extended to provide for all mentally retarded children. Additional special class services are required for all age levels for both educable and trainable retarded children. However, it is doubtful that comprehensive programs will be developed in most communities without the additional incentive of external financial support, provided by the federal government through the E & I program.

The Panel suggests that services of educational diagnosis and evaluation be extended to all school systems to provide for early detection of school learning disabilities and to enable appropriate school placement.

The U.S. Office of Education is urged to increase its administrative leadership and staff of the program for exceptional children to a level commensurate with the importance of exceptional children in the nation's program of public education.

The Panel underlines the need for an additional 55,000 trained teachers of the mentally retarded. If fully implemented, the Panel states, the following program would add 6,000 new teachers each year to the pool of skilled teaching specialists in retardation:

- Government and private foundations should provide annually \$9 million to be awarded to universities to provide scholarships and to support the training program.

- Each state should appropriate an amount equal to at least 5 percent of its annual budget for special education for training grants to experienced teachers wishing to specialize in mental retardation. It is recommended that the government match the funds allocated by the state departments of public instruction.

- Local school systems (by granting leave-of-absence with pay), community agencies, and civic organizations should contribute to the education of those who will teach their retarded children. Concerted effort on the part of these local groups should enable them to achieve the reasonable objective of a contribution of \$3 million annually--an average of \$1,000 from each of the 3,000 local school systems now operating programs for the retarded.

The Panel also urges that methods be developed to provide for more effective training and use of personnel for teaching retarded pupils. Research and demonstration projects should be initiated to determine staffing patterns to conserve teaching manpower.

It is recommended that the Fellowship Program under Public Law 85-926 be extended to include provisions for preparing research specialists. Funds are currently available under Public Law 85-926 for the preparation of administrators, supervisors, and college and university instructors in special education, excluding, however, persons who wish to prepare for research careers.

Vocational Rehabilitation

Recent progress in vocational rehabilitation must be tempered by recognition that only about 3,500 retarded persons were reported as rehabilitated under the federal-state program over the past year. This figure is negligible when compared with even the most conservative estimate of the retarded who could benefit from this service. The Vocational Rehabilitation Administration (VRA) is deeply interested, however, and has been active for some time in developing this aspect of its program.

If the present need were being met in full:

- 75,000 retarded youth in their final year of schooling would be receiving services such as prevocational counseling and evaluation, and job placement.

- 19,000 retarded youth would be receiving post-school preparation for competitive work in an employment training center or comparable facility.

- 120,000 moderately retarded adults would be receiving services and working in workshops or similar places.

- 75,000 severely retarded adults living in communities would be receiving services in facilities providing training in basic living skills, recreation, etc.

In the future the demand for vocational rehabilitation services will increase. Opportunities for jobs traditionally identified with the retarded are on the decrease. Competition for these jobs is becoming keener as unskilled workers, displaced by automation, seek jobs once held almost exclusively by the retarded. Adverse effects of recessions are likely to be felt more acutely by mentally retarded than by nonretarded workers.

The Panel recommends that vocational rehabilitation services for retarded youth and adults be expanded through earmarking of federal funds under the federal-stage program of vocational rehabilitation.

If the productive capacities of the nation's mentally retarded are to be realized, every retarded youth must have the following services available to him prior to, during, and after termination of his formal education: vocational evaluation, counseling, and job placement; training courses in appropriate vocational areas; joint school-work experience programs co-sponsored by schools and vocational rehabilitation agencies; clearly defined and adequately supervised programs for on-the-job training; employment training facilities; sheltered workshops; vocational rehabilitation services in conjunction with residential institutions; and counseling services to parents.

The report also calls for a federal program to provide financial support for constructing, equipping, and initially staffing sheltered workshops and other rehabilitation facilities, through VRA. Comparable programs for other types of facilities exist in other agencies of government and have, in general, proven highly effective. The Hill-Burton Act is the legal basis for one such program.

The Panel also suggests that VRA be given responsibility for leadership in planning, developing, coordinating, and supervising a system of sheltered work programs. The programs themselves should be operated by voluntary and public agencies with assistance from state and federal rehabilitation agencies; they should be developed in stages with small-scale pilot projects serving as a base for expansion. Hopefully, this would lead eventually to the establishment of sheltered work programs in every major urban community in the nation.

Residential Care

In this area, the report recommends that:

- Every residential facility be: an integral part of a state-wide program for the retarded and closely related to the community; basically therapeutic or educational, and closely linked to appropriate community medical, education, and welfare programs; operated under flexible admission and release policies, similar to those of a hospital or school; and equipped to undertake research in some form as a part of its program.

- Admission to residential care be reserved for those whose specific needs can best be met via such a facility.

- Appropriate authorities in every state determine the status of all mentally retarded patients in state hospitals for the mentally ill at regular intervals and remove those who can profit by care designed primarily for the retarded.

- Upon presentation of plans meeting criteria established by the Secretary of Health, Education, and Welfare, matching grants be provided to the states for institutions to facilitate planning and development, recruiting and training personnel, and research.

- No institution for the retarded accommodate more than 1,000, and units now being planned for future construction not exceed 500 beds.

The Law and the Mentally Retarded

The Panel approaches this problem from the point of view that, with the development of new alternatives in treatment, it should now be possible to overcome certain rigidities of the law in the interest of giving the retarded individual the benefit of modern knowledge. The Panel suggests that mandatory legal requirements be minimized wherever voluntary compliance can be obtained. The question of formal legal intervention is regarded as a residual resource which should not be utilized where social or personal interests can be adequately served through other means.

This section of the report, nonetheless, points out that the law must protect the rights of the retarded. Like other citizens they must be assumed to have full human and legal rights and privileges. The mere fact of mental retardation should never be considered in and of itself sufficient to remove their rights.

The Panel recommends specifically that:

- Each state establish or designate a protective agency for the retarded, to provide for consultation for them and their families and for employers, guardians, and others concerned with their social and legal problems, and to supervise the private guardians of retarded persons.

- Superintendents of residential facilities for the retarded accept as "voluntary" admissions only those adults who are capable of making such a decision.

- No limited guardian of a mentally retarded adult be able to commit his ward to an institution without a judicial hearing unless the court order appointing the guardian gave him such discretion--in which case he should inform the court of his ward's change of residence.

- Since state and local school authorities are constitutionally obliged not only to provide education for educable mentally retarded children, but also to provide training facilities and personnel for trainable mentally retarded children, these authorities re-examine the extent to which they provide education and training for mentally retarded children.

- The court in deciding whether a confession to a crime was coerced-- and hence inadmissible at trial-- consider all the relevant circumstances, and assess whether the mentally retarded defendant's state of mind was such as to preclude the confessions being voluntary in any meaningful sense; and that caution be taken against giving any probative weight to the fact that a mentally retarded defendant remained silent when accused of a crime.

- The mentally retarded individual who exhibits persistent uncontrolled behavior threatening the well-being of others requires special attention, which should be a subject of special study, since he is unsuited both to the typical prison and to most residential facilities for the retarded.

Local, State, and Federal Organization

Concerning local, state, and federal organization and relationships, the Panel recommends that:

- There be available to every retarded person either in his community or at a reasonable distance: a person, committee, or organization to whom parents and others can turn for advice and counsel; life counseling services; and a sufficient number of qualified professional and informed nonprofessional people willing to assist in developing a program for an individual, and in developing a local or state program.

- Every health, education, and welfare agency provide a person, office, division, or other appropriate instrumentality to organize and be responsible for those agency resources or services relevant to mental retardation; and those agencies dealing with the retarded at a local, community, or state level establish committees with high level representation to facilitate communication and cooperation.

- A formal planning and coordinating body made up of all appropriate segments of the community be established with the mandate to develop and coordinate programs for the retarded.

- The federal government take leadership in developing model community programs for the management of mental retardation in each of the Department of Health, Education, and Welfare regions. The objectives of such models would be: to develop concrete examples and demonstrations of what is believed to be the best possible care for the retarded on a coordinated basis; and to provide teaching resources in which present and future administrative and professional personnel could receive higher quality training.

- The Secretary of Health, Education, and Welfare should be authorized to make grants to states for comprehensive planning in mental retardation.

MANPOWER FOR MEDICAL RESEARCH

Herbert H. Rosenberg and Luther W. Stringham

Medical and health-related research comprises a broad area of scientific inquiry aimed at the improvement of human health and the conquest of disease.

It includes all systematic study directed toward the development and use of scientific knowledge through fundamental research in the laboratory, clinical investigations, clinical trials, epidemiological studies, and engineering studies in (1) the causes, diagnosis, treatment, control, prevention of, and rehabilitation relating to, the physical and mental diseases and other killing and crippling impairments of mankind; (2) the origin, nature, and solution of health problems not identifiable in terms of disease entities; (3) broad fields of science where the research is undertaken to obtain an understanding of processes affecting disease and human well-being; (4) research in nutritional problems impairing, contributing to, or otherwise affecting optimum health; and (5) development of improved methods, techniques, and equipment for research, diagnosis, therapy, and rehabilitation.

Medical and health-related research, hereafter referred to more briefly as "medical research," draws upon the life, physical, engineering, psychological, and social sciences and upon many disciplines within each field.

Trends in Manpower Engaged in Medical Research

The number of professional workers engaged full or part-time in medical research rose from 19,200 in 1954 to 39,700 in 1960--a net increase averaging 3,500 per year (Table 1).

The dominant characteristics of this growth are as follows:

The largest increase has taken place in universities and research institutes.

Dr. Rosenberg is the Chief, Resources Analysis Branch, Office of Program Planning, National Institutes of Health; and Mr. Stringham is the Director, Office of Program Analysis, Office of the Assistant Secretary (for Legislation), U. S. Department of Health, Education, and Welfare. This article reproduces portions of the "Report on Manpower for Medical Research" prepared in response to a request by the House Appropriations Committee and appearing in Departments of Labor and Health, Education, and Welfare Appropriations for 1963, Hearings Before a Subcommittee..., House of Representatives, 87th Congress, Second Session, Part 4. This Report has been reissued as "Manpower for Medical Research Requirements and Resources, 1965-1970" (Resources for Medical Research, Report No. 3, January 1963), U. S. Department of Health, Education, and Welfare; Public Health Service, Publication No. 1001.

Health, Education, and Welfare Indicators, July 1962

- The number engaged full-time in medical research has been rising, and those working part-time are devoting a larger share of their energies to research.

- Research opportunities combined with teaching and/or service responsibilities have become increasingly attractive to M.D.'s.

- Participation of Ph.D.-trained manpower has been rising rapidly, accompanied by the growing involvement of the physical and the social and behavioral sciences in medical research.

- The underlying supportive force in this development has been the substantial enlargement of national programs for private and public support of research, research training, and construction of research facilities.

In 1960, of the 39,700 professional workers engaged in medical research, 24,700 were employed in universities and research institutes, 7,800 in government, and 7,200 in industry. By field of specialization they were distributed as follows: biosciences, 17,160; clinical specialties, 10,305; physical science, mathematics and engineering, 7,045; social and behavioral sciences, 3,255; dentistry, 610; and health professions and all other, 1,325.

Table 1

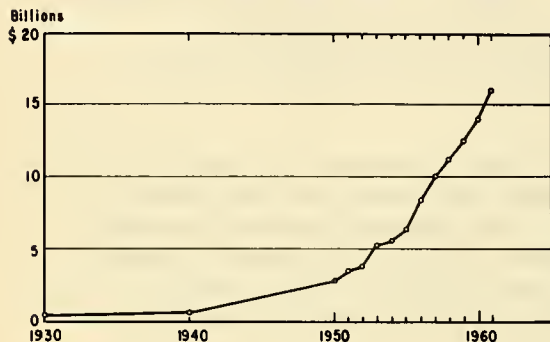
Scientific and Professional Manpower Engaged
in Medical and Health-Related Research

Time factor	1954	1958	1960	Increase 1954-1960	
				Number	Percent
Total number	<u>19,200</u>	<u>34,600</u>	<u>39,700</u>	<u>20,500</u>	<u>106.8</u>
Full-time equivalent	(14,000)	(23,100)	(27,285)	(13,285)	(94.9)
Full-time	11,260	17,245	19,400	8,140	72.3
Full-time equivalent of part-time	(2,740)	(5,855)	(7,885)	(5,145)	(187.8)
Part-time	7,940	17,355	20,300	12,360	155.7

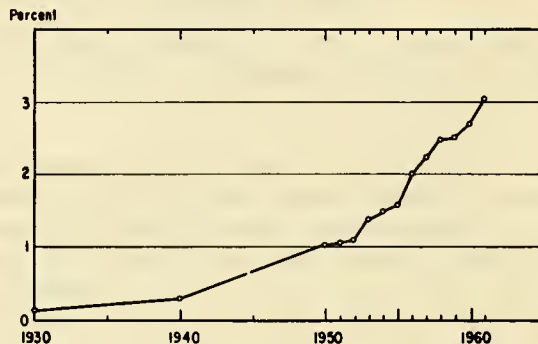
Increases in National Expenditures for Research and Development

Since 1940 the Nation's total expenditures for research and development multiplied almost fifty-fold. The increase was particularly rapid between 1950 and 1961, when expenditures grew from \$2.9 billion to \$16 billion. Research expenditures have increased at a more rapid rate than the gross national product, rising from 0.34 percent of GNP in 1940 to 3.08 percent in 1961.

**TRENDS IN TOTAL NATIONAL EXPENDITURES
FOR PERFORMANCE OF RESEARCH AND DEVELOPMENT**

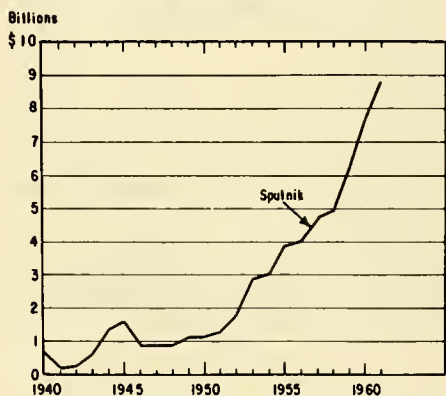


**RELATION OF TOTAL NATIONAL EXPENDITURES
FOR RESEARCH AND DEVELOPMENT
TO GROSS NATIONAL PRODUCT**



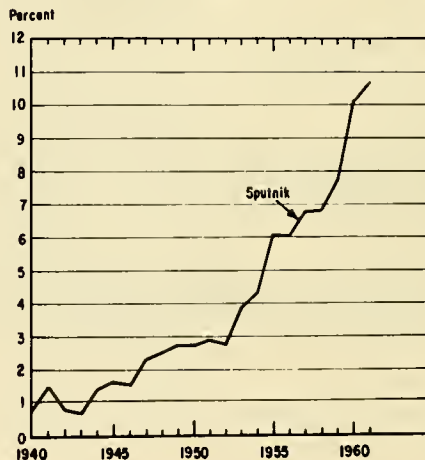
Federal expenditures for research and development increased roughly \$1 billion between 1940 and 1950. During the 1950's, however, the Federal outlay rose nearly seven-fold, jumping to \$8.8 billion in 1961. Triggered by rising military research expenditures for national security and, more recently, by the Nation's space research activities, research and development expenditures have mounted from less than one percent of the Federal budget in 1940 to almost 3 percent in 1950 and to nearly 11 percent in 1961.

**TRENDS IN FEDERAL EXPENDITURES
FOR RESEARCH AND DEVELOPMENT**



NOTE: Data since 1953 reflect inclusion of research and development financed with funds formerly classified as procurement.

**RELATION OF FEDERAL RESEARCH
AND DEVELOPMENT EXPENDITURES
TO TOTAL BUDGET EXPENDITURES**



Expenditures for Medical Research and Development

Expenditures for medical research generally have followed the pattern of the Nation's total research effort. Total medical research expenditures, public and private, rose from \$148 million in 1950 to about \$1 billion in 1961.^{1/} Medical research expenditures now approximate 6 percent of all expenditures for research and development (Table 2).

Table 2

Medical Research and Development Expenditures

Year	Research and Development (millions of dollars)		Medical as percent of total
	Total	Medical	
1950	2,900	148	5.1
1951	3,400	163	4.8
1952	3,800	173	4.6
1953	5,150	203	3.9
1954	5,620	225	4.0
1955	6,390	240	3.8
1956	8,460	285	3.4
1957	10,040	397	4.0
1958	11,160	490	4.4
1959	12,430	587	4.7
1960	14,000	715 ^{1/2}	5.1
1961	16,000	890 ^{1/2}	5.6

Source: 1950-52, Department of Defense; 1953-60, National Science Foundation; 1961, National Institutes of Health.

^{1/} According to more recent data, the Nation's expenditures for medical research were some \$820 million in 1960 and exceeded \$1 billion in 1961. The revised estimates reflect better coverage of Federal expenditures and expenditures in the medical supply and medical electronics sectors of industry. As soon as possible, the basic series on the Nation's expenditures for medical research from 1947 forward will be adjusted to reflect the improvements in coverage. However, the estimates for 1960 and 1961 shown in the table have been used throughout this analysis in order to permit comparison with prior years.

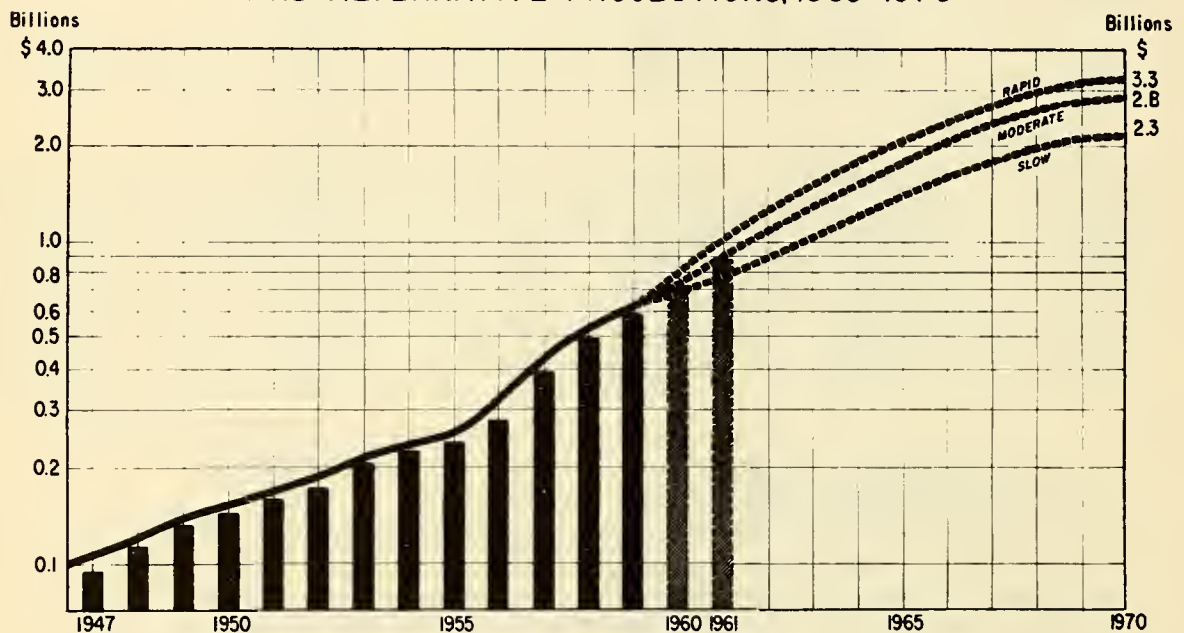
Federal support of medical research has become an increasingly significant component of the Nation's total medical research expenditures, rising from 32 percent in 1947 to 56 percent in 1961. Industry and other non-Federal sources also are supporting substantially expanded outlays, which reached \$394 million in 1961.

Future Growth of Medical Research Expenditures

Various study groups have considered possible future increases in expenditures for medical research, taking into account such factors as prior growth rates, anticipated increases in gross national product, total research and development as a percent of GNP, and medical research as a component of total research and development.

Based on these factors, alternative projections of medical research expenditures to 1970 have been computed. These projections range from \$2.3 billion to \$3.3 billion (Chart 1). The total of \$3 billion in national expenditures for medical research in 1970 has been widely accepted.* It has been used as a reasonable and feasible basis for estimating research manpower needs.

Chart 1
NATIONAL EXPENDITURES FOR MEDICAL RESEARCH, 1947-1959
AND ALTERNATIVE PROJECTIONS, 1960-1970



*The figure of \$3 billion should not be construed as a goal or target of this Administration. Furthermore, the \$3 billion projection is in terms of 1958 dollars and does not include any adjustment for erosion in the purchasing power of the dollar. Assuming continuation of the 1954-1958 rate of inflation, \$3 billion in 1970 would purchase only \$2.3 billion of research, expressed in 1958 dollars. Thus, if the 1954-58 rate of inflation continues through the 1960's, the \$3 billion projection for 1970 may range between \$4 billion and \$4.8 billion when expressed in 1970 current dollars.

Manpower Needed to Meet the Future Growth of Medical Research

Future manpower requirements for medical research may be estimated by dividing expenditures per professional worker into projected research expenditures. Between 1954 and 1960 expenditures per year per professional worker in medical research increased from about \$12,000 to about \$18,000.

During the 1960's expenditures per professional worker will continue to rise, reflecting (1) large-scale clinical research programs which involve high costs per investigator, (2) more complex and precise instrumentation, (3) conduct of large-scale, long-term population studies, and (4) greater use of higher-paid and more highly skilled professional-level technicians. These increased costs will come about even if prices remain constant for the next decade. If it is assumed, however, that such forces will result in an 8 percent yearly increase in expenditures per professional worker (expressed in 1960 constant dollars), as compared with the 5.3 percent per year increase that prevailed during the period 1954-1960, expenditures per professional worker will be about \$39,000 in 1970.

By dividing the estimated national expenditures of \$3 billion for medical research in 1970 by \$39,000 per research worker, it is estimated that some 77,000 professional medical research workers will be needed in 1970. This requirement will call for adding 45,000 professional workers over the decade, including 7,700 needed for replacement due to death, retirement, and shifts to other activities among the present 39,700 persons engaged in medical research (Table 3).

Thus the number of additional scientists--45,000--needed for medical research by 1970 exceeds the total number now at work. While the distribution by performing sector, level of training, and field of science of the additional researchers can be predicted with less confidence, past trends indicate that the future probably will reflect:

- A higher proportion of researchers working in universities, medical schools, hospitals, research institutes, and research organizations in foreign countries.
- A higher proportion of doctoral trained researchers.
- A broader distribution among the fields of science participating in and contributing to medical and health-related research.
- Increasing specialization of the research function and rising recognition of research as a full-time socially useful career.
- Rising needs in such rapidly growing disciplines as biophysics, genetics, immunochemistry, biomathematics, and neurophysiology, with an attraction into these fields of biologists, physicists, chemists, mathematicians, and clinicians.

. Sharply rising requirements for well-trained, highly skilled technicians to complement the professional researchers, especially as complex instrumentation and precise controls become increasingly significant factors in medical research.

Meeting Medical Research Manpower Requirements for the Future

An illustrative distribution by level of training of the additional 45,000 researchers needed by 1970 are presented in Table 3 and in Chart 2.

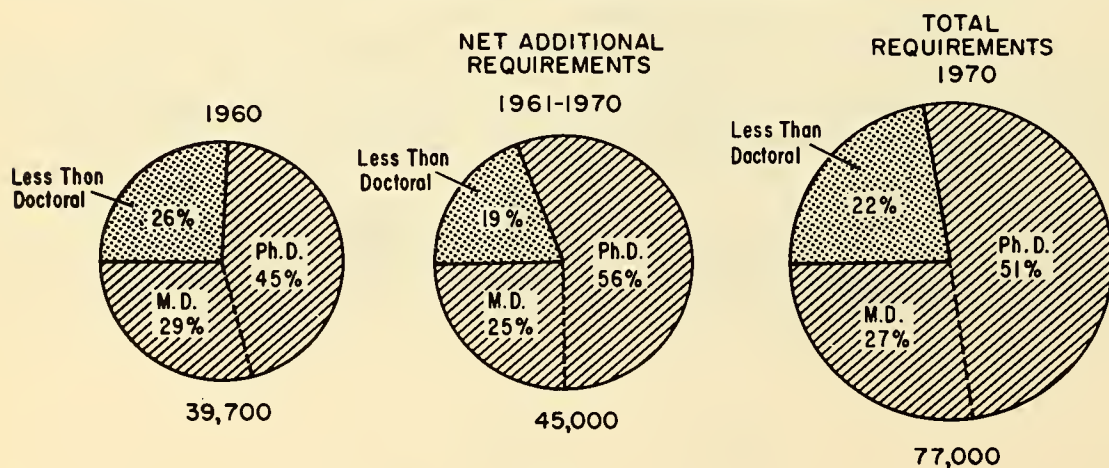
Table 3

Medical Manpower Requirements for 1970

Item	Total	Doctoral			Less than doctoral (M.S., M.P.H., M.A., B.S., A.B.)
		Total	M.D. D.L.S. D.V.M.	Ph.D. Sc.D.	
Requirements for 1970	77,000	60,000	20,500	39,500	17,000
Less employment, 1960	39,700	29,400	11,400	18,000	10,300
	37,300	30,600	9,100	21,500	6,700
Plus attrition through death, retirement, and movement into other activities	7,700	5,900	2,400	3,500	1,800
Equals net additional requirements, 1961-1970	45,000	36,500	11,500	25,000	8,500

Chart 2

MANPOWER FOR MEDICAL AND HEALTH-RELATED RESEARCH BY DEGREE 1960-1970



During the past ten years, private and public research and training programs have attracted increasing numbers of doctoral level investigators from all fields of science into medical research. These programs have (1) enlarged opportunities for research, (2) expanded and equipped greatly-needed research facilities, and (3) provided support for research training and for the graduate education processes through mechanisms that have aided both students and institutions. All of the existing mechanisms must be retained and expanded, with suitable modifications, if the needed manpower is to be produced.

Until the late 1960's, the supply of manpower for medical research will depend almost exclusively upon those who have already received M.D. or Ph.D. degrees, and who are now getting postdoctoral research training or experience. It is probable that about one-half of the additional Ph.D.-trained manpower and roughly two-thirds of the M.D.'s must come from the group already past the basic Ph.D. and M.D. training respectively.

The remaining doctoral-trained researchers must come from those who have not yet received their advanced degrees. Here two factors are important--the total output of M.D.'s and Ph.D.'s in science, and the proportion of this total output engaging in medical research. So far as total output is concerned, it appears that about 75,000 new M.D.'s may be produced between 1960 and 1970. This estimate rests upon maintenance of the productivity of existing schools, full activation of schools already established, and completion of schools now firmly planned. It is also estimated that between 90,000 and 95,000 new Ph.D.'s may be produced between 1960 and 1970. Both of these forecasts rest upon the assumption that deliberate efforts to expand output will be made. The more successful the efforts, the larger the output. The figures further emphasize the fact that enlargement of the pool of M.D.'s and Ph.D.'s in science is fundamental to an expanded medical research effort.

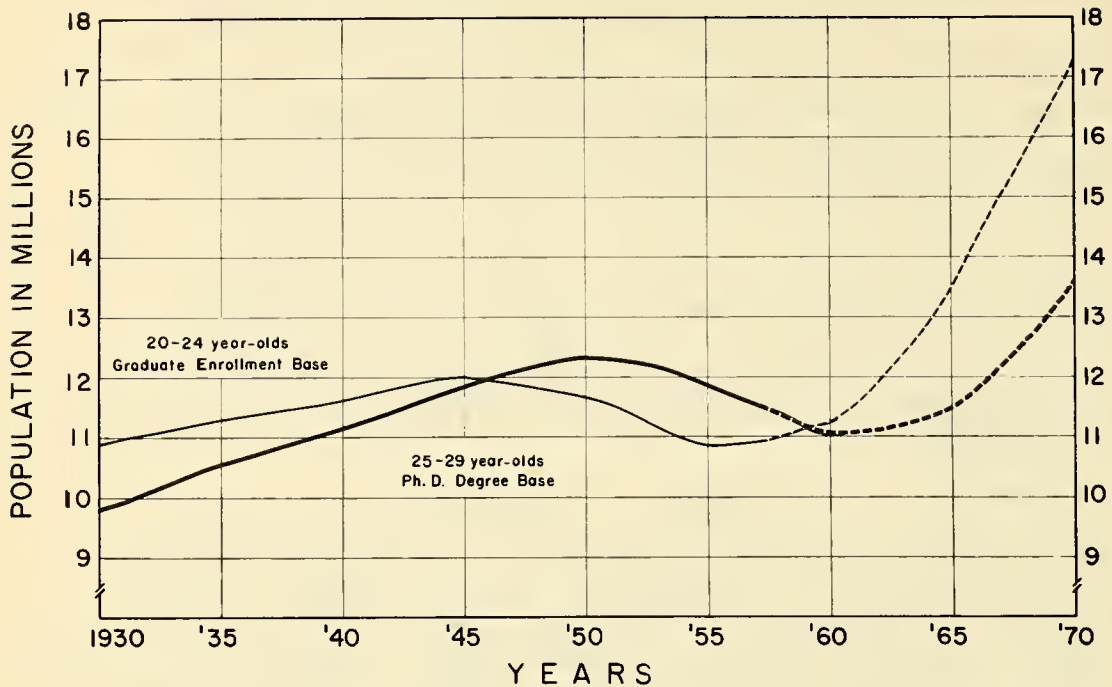
From the total pool available, those who can and will engage in medical research is somewhat problematical. In particular, the mounting demand for more scientists in other activities affecting the national interest will influence the realization of these estimates. In any event, however, it is clear that the required numbers will not be available for research unless:

1. Research combined with teaching and/or service becomes an increasingly attractive and productive career pattern for M.D.'s, recognizing that most M.D.'s in research in medical schools and teaching hospitals will contribute to teaching and service, and

2. A steadily increasing proportion of Ph.D.'s in the biological and physical sciences, mathematics, engineering, psychology and the other social and behavioral sciences engage in medical research.

Chart 3

POPULATION BASE FOR Ph. D. OUTPUT, 1930-1970



After 1970, the resource base for meeting medical research manpower requirements will broaden substantially through (1) a sharp expansion in the population age groups from which new M.D.'s and Ph.D.'s must be drawn, (2) steeply rising enrollment at all levels of higher education. This base will expand most rapidly during the late 1960's and thereafter (Chart 3). The longer range population trends, reflecting the increased number of births that occurred during and after World War II, will create a wave of college students and subsequently of advanced degree candidates that will affect the supply of new entrants into medical research, primarily after 1970.

Additional measures directed primarily at expanding the total pool of manpower are needed, and efforts should be initiated as soon as possible to:

- Expand college matriculation, especially among more talented, less privileged youth.
- Enlarge graduate enrollment in all fields, but especially in fields most directly relevant to medical research.

- Increase the number of medical students as rapidly as possible to assure an adequate future supply of physicians to meet all the health needs of the Nation.

- Accelerate the output of Ph.D.'s.

- Orient the Nation's youth toward the exciting challenges and rewarding career opportunities in biology and medicine.

Meeting the Nation's future requirements for medical research manpower, thus, will depend upon national policy and action at both the Federal and non-Federal levels designed to (1) provide more general support for the graduate education process, (2) reduce the attrition and accelerate the flow of graduate students toward the Ph.D. degree, (3) expand research and teaching facilities to accommodate steadily growing research activities and rapidly rising enrollment, (4) enlarge the Nation's capabilities for specialized and intensified research training at the post doctoral level, (5) develop an adequate supply of highly skilled, professional-level technicians, as well as technicians at lower levels, demanded to assist in increasingly complex, highly instrumented research activities, and (6) assure stable and rewarding career opportunities under conditions most suited to productive scientific inquiry.

HEALTH FACILITY CONSTRUCTION

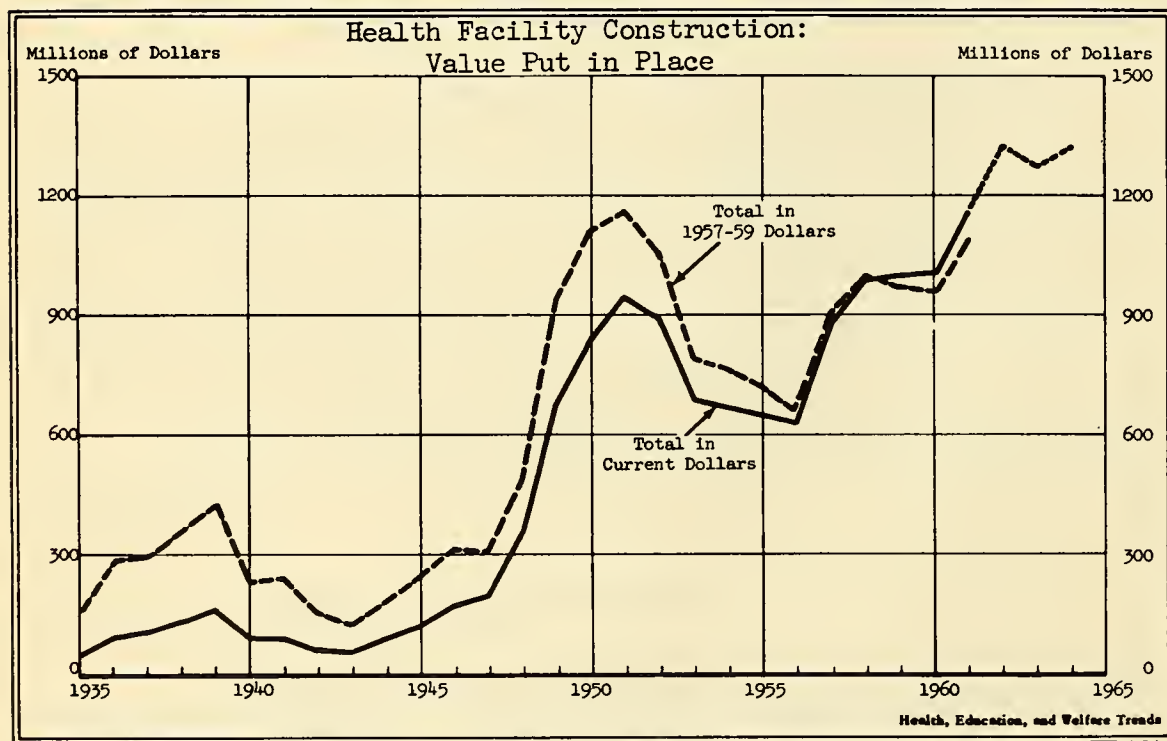
Jack C. Haldeman and Luther W. Stringham

A wide variety of health and medical facilities provide care and treatment for persons with illnesses, injuries, or other conditions requiring medical attention. These facilities include: general hospitals, which are primarily for the short-term care of acute illnesses and injuries and for obstetrics; mental hospitals; tuberculosis hospitals; chronic disease hospitals; nursing homes; diagnostic and treatment centers; public health centers; and rehabilitation facilities.

National Expenditures for Construction

The construction of hospitals and other medical facilities has fluctuated widely during the past three decades (Chart 1). During the depression years of the 1930's and during World War II construction was at a low level, averaging less than \$100 million per year. Following the War it rose rapidly to a peak of over \$900 million in 1951. After some decline in the mid-1950's, the current dollar value of hospital and medical facilities construction since 1958 has approximated \$1 billion per year.

Chart 1



Dr. Haldeman is the Chief, Division of Hospital and Medical Facilities, Public Health Service; and Mr. Stringham is the Director, Office of Program Analysis, Office of the Assistant Secretary (for Legislation), U. S. Department of Health, Education, and Welfare. This paper is based primarily on "The Hill-Burton Program: Accomplishments and Future Course," July 1962, Division of Hospital and Medical Facilities, Public Health Service, U. S. Department of Health, Education, and Welfare.

Health, Education, and Welfare Indicators, September 1962

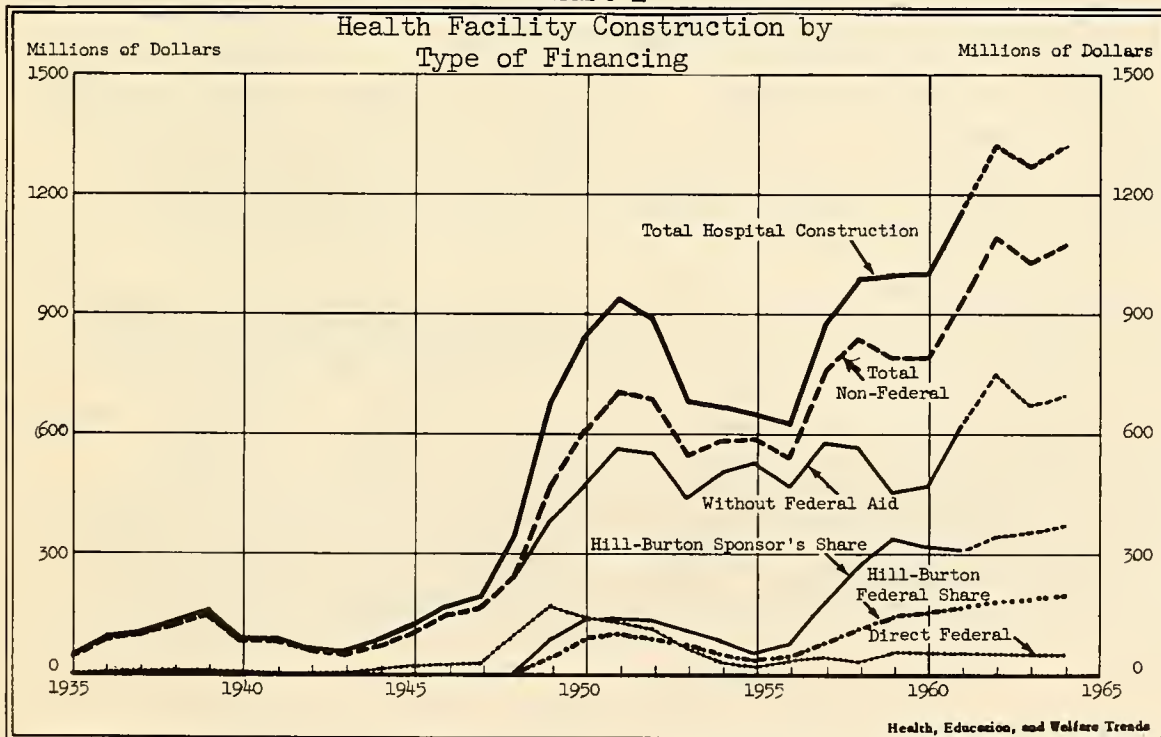
Even when adjustment is made for increases in building costs, the yearly volume of construction since 1946 has been about three times the level of the period 1930-1945.

Hospital Construction by Source of Funds

During the 14 years 1948 through 1961, \$10.3 billion were spent on the construction of health facilities, excluding Federally-owned facilities.^{1/} Of this total, \$6.9 billion were spent on projects without Federal aid. The volume of construction without Federal aid, after reaching a postwar volume of about \$500 million annually, has maintained this level on a fairly stable basis (Chart 2). In addition to the \$6.9 billion spent on health facilities without Federal aid, \$3.4 billion was spent from 1948-1961 on facilities for which Federal aid was received under the Federal hospital and medical facilities construction (Hill-Burton) program. Of these expenditures of \$3.4 billion, the sponsor's share was \$2.2 billion, and the Federal share was \$1.2 billion. Thus Federal funds under the Hill-Burton program have accounted for 35 percent of the cost of Federally-aided construction and 12 percent of total hospital construction (other than direct Federal construction).

To date, changes in Hill-Burton appropriations have had no demonstrable effect on the volume of construction without Federal aid. Rather the variations in non-aided construction appear to be related more consistently (with a two-year lag) to changes in the cycle of business activity.

Chart 2



^{1/} Direct Federal construction, mainly by the Armed Forces, Veterans Administration, and the Public Health Service, totaled \$1.1 billion during this period.

Genesis of the Hospital Survey and Construction Act

Prior to 1946 hospital expansion in the United States was uneven. There was overbuilding in some communities and a complete lack of facilities in others. In 1928 some 1200 counties, with a population of 15 million, had no hospital facilities.

With the close of the War, growing demands for hospital care focused national concern on the need for increasing the supply of hospital facilities. In August 1946, following intensive study by the American Hospital Association, the Commission on Hospital Care, and the United States Public Health Service, Congress passed the Hospital Survey and Construction Act, establishing what is generally known as the Hill-Burton program. Its major purposes were twofold: (1) to assist the States in making an inventory of existing facilities, in surveying their needs for additional facilities, and in developing comprehensive plans for construction of additional facilities; and (2) to provide the necessary incentive, through financial assistance to the States, for the construction of long-needed public and other nonprofit hospitals, public health centers, and related hospital facilities.

In 1954 the Act was amended to provide funds for constructing nursing homes, diagnostic and treatment centers, rehabilitation facilities, and chronic disease hospitals. At the same time the Public Health Service was authorized to conduct and make grants for hospital research. The enactment of the Community Health Services and Facilities Act of 1961 further expanded the research program by authorizing experimental and demonstration construction and equipment projects.

To participate, each State is required to designate a single State administering agency and to develop an annual State Plan for construction, including an inventory of all civilian inpatient and outpatient facilities available and a long-range program for meeting additional facility needs.

Sums appropriated are allotted to the States in accordance with a statutory formula which takes into consideration the population and relative per capita income of the States and territories. The formula operates so that the largest per capita share of the Federal appropriation goes to the States with the lowest per capita income, which also are generally those having the greatest unmet need for hospital services. The States of lowest per capita income receive a per capita share of the annual Federal appropriation approximately four times as large as in the States with highest per capita income. The total minimum annual allotment to a State is now \$550,000. Federal participation may range from one-third to two-thirds of the total costs of constructing and equipping an approved project.

Summary of Accomplishments Under the Hill-Burton Program

As of June 30, 1962, a total of 6,236 projects had been approved for Federal aid under the Hill-Burton program. Of this total, 4,728 were completed and in operation. The remaining 1,508 are under construction or in the planning stage.

The 6,236 projects will provide 274,205 inpatient beds and 1,644 other health facilities, as shown below:

- 206,074 general hospital beds
- 17,553 mental hospital beds
- 31,325 nursing home beds
- 12,044 chronic disease hospital beds
- 7,209 tuberculosis hospital beds
- 905 public health centers
- 478 diagnostic and treatment centers
- 234 rehabilitation facilities
- 27 State health laboratories

Thus since World War II important progress has been made in providing for health facilities construction from both private and governmental sources. Additional hospital beds and health centers have been provided, and there also has occurred, mainly as a result of the Hill-Burton program, (1) systematic statewide planning for hospital facilities; (2) development of standards of need; (3) achievement of better distribution of facilities; (4) improvement of hospital design; (5) improvement in hospital operation; (6) effective cooperation between government and voluntary health agencies; (7) improvement of medical care in low income States and in rural areas; and (8) aid to teaching centers for training physicians and nurses.

Despite progress in construction and in Statewide planning, wide gaps and imbalances still exist in the availability of hospital and related health facilities. New problems, which must be faced and solved, accent the need for more intensive, systematic, and sound planning at the community level. Remaining needs and construction objectives for the future are summarized below.

General Hospitals

National progress in construction has been substantial, but uneven, during the past 15 years. Marked gains have been made in general hospital facilities, particularly in low-income States, in the smaller towns and rural areas. Nationally, the number of acceptable general hospital beds has increased from 388,100 in 1948 to 632,400 in 1962--a bed rate increase per thousand population from 2.8 to 3.5.

Nevertheless, in many areas, acceptable general hospital facilities are unevenly distributed or lacking. Serious shortages exist in many

fast-growing suburbs, in sections of metropolitan areas occupied principally by minority groups, and in some sparsely-settled rural areas. In contrast, excess general beds and a consequent unnecessary duplication of services are found in some communities or portions of communities. Continuing population growth, migration from rural to urban areas, movement from urban centers to suburban communities, and urban renewal programs are major factors in adding to the problem of the distribution of facilities.

In planning to overcome shortages and maldistribution of facilities, the impact of other factors must be weighed; for example, the availability of alternative types of facilities such as skilled nursing homes, the introduction of home care programs, provisions for ambulatory care, or the extension of general hospital functions into areas such as psychiatric or rehabilitation service.

Long-term Care Facilities

Recent substantial gains have been made in the provision of chronic disease and nursing home (long-term care) facilities for the elderly. Since 1957 the number of acceptable long-term care beds has increased by 65 percent--from 155,500 to 255,900. Although it is difficult to establish precise need figures, the States estimate that less than one-third of their long-term bed need has been met and that an additional 500,000 beds are needed. This estimate is confirmed if the long-term care beds in all States were brought up to the level of the five States with the highest ratios of long-term care beds per 1,000 elderly.

Gross as are the present inadequacies in long-term care facilities, the future outlook is for even more serious deficiencies unless rigorous action is taken. In 1960 the population aged 65 and older numbered nearly 17 million. By 1980 the elderly probably will exceed 24 million. Special effort is needed, not only to correct present deficiencies, but also to prevent the gap between existing and needed facilities from widening as the numbers of aged increase. Moreover, the possibility of passage of Federal legislation that will partially remove the economic barrier to institutional care of the elderly further emphasizes the need for early and aggressive action in meeting the need for long-term care facilities.

Mental Health Facilities

Although acceptable mental beds have steadily increased in number over the years, they have failed to keep pace with population growth. Between 1948 and 1962, the acceptable mental bed capacity increased from 380,000 to 468,000, but in terms of beds per 1,000 population, dropped from 2.75 beds per 1,000 persons to 2.60. In the past, additional needs for mental facilities have been met by expanding existing State and local government institutions. Current planning concepts discourage further construction or expansion of large mental institutions and emphasize the need for providing smaller, flexible, community-based facilities. The

wide spectrum of services to be provided through community-based mental health facilities would include activities such as outpatient and emergency care through hospitals or mental health centers, increased use of general hospitals for treatment of psychiatric patients, halfway houses, day and night hospitals, and nursing homes.

The majority of States estimate their need for mental beds on a fixed bed-population ratio--usually 5 beds per 1,000 persons. On this basis, the present existing acceptable bed count constitutes only about 50 percent of the estimated national need. While the precision and validity of this programming technique is open to question, the crowded conditions of mental hospitals and the need for changing to community-based facilities attest to the need for additional construction activity in this area. Studies are now underway to determine the scope of the mental illness problem and the numbers and types of facilities required to provide needed care.

Facilities for the Mentally Retarded

Approximately 5 million persons, or about 3 percent of the total population, are estimated to be mentally retarded. Nearly one-third are under 20 years of age. Traditionally, State institutions have sought to provide care, treatment, training, and education for retarded individuals, either in preparation for return to the community or as the basis for a contented and useful life within the institution. The trend today, however, is toward caring for as many of the mentally retarded as possible outside of institutions. The mildly retarded seldom require institutional care. However, a greater number of the moderately retarded and almost all of the severely retarded ultimately require care in a facility that provides not only educational and training programs but also medical treatment for complicating physical problems.

It is essential that careful consideration be given to the treatment and protection of retarded individuals on the basis of individual need. Programs should be planned for a wide range of deficiency, including lifetime care for some. Although institutions for prolonged care must be basically hospitals, other kinds of community facilities and training and rehabilitation programs should be established for the moderately and mildly retarded. These include day care centers, sheltered workshops, diagnostic and evaluation centers, nursing homes, foster care and homemaker services, and special classes within the educational system.

Tuberculosis Hospitals

Nationally, the need for tuberculosis facilities is continuing to decline with the decreasing incidence of new cases requiring institutional treatment. Within the past decade, more than 200 tuberculosis hospitals have closed their doors or have converted to other uses. Low occupancy rates and rising operating costs, combined with pressures to make excess beds available for other conditions, have been major factors in decisions to close or convert tuberculosis facilities. Although new

construction has virtually ceased, the problem of effective use of existing facilities remains to be solved. Not to be overlooked is the extensive modernization and renovation needed for those facilities which continue in use--many of which were established in the early 1900's.

As in the mental illness field, trends in the treatment and care of the tuberculous have moved toward greater emphasis on early diagnosis and ambulatory care. Plans for needed new construction of tuberculosis facilities should be made in conjunction with plans for other chronic care facilities, including the provision of service through specialized units of community-based general hospitals.

Modernization or Replacement of Older Facilities

The depression years and wartime military restrictions caused cumulative deficits in hospital facilities. These deficits led to postwar emphasis on new hospital construction and plant expansion. Since most earlier hospitals were in urban centers, postwar attention with Federal assistance was focused on rural shortages, leaving urban projects with low priorities. Meanwhile, physical deterioration and functional obsolescence moved slowly but inevitably upon the older city hospitals. In many urban situations the problem has been intensified by population movement from the urban center to the suburbs, by industrial, commercial, and transportation changes, and by urban redevelopment programs.

A Public Health Service survey in 1960 produced a national cost estimate of \$3.6 billion to modernize or replace obsolete general and mental facilities without adding more beds. This estimate is nearly 4 times the current level of annual construction expenditures for hospital and related facilities, including new construction as well as modernization. The problem is particularly grave in many metropolitan areas where hospitals have been unable to replace worn-out buildings and equipment. The 1960 survey indicated a cost of \$2.2 billion solely to modernize or replace general hospital facilities in metropolitan communities. Nevertheless, regardless of size of community, any hospital which has been in existence for a number of years may find itself in need of a capital construction program.

Other Health Facilities

The growing costs of inpatient care have led to greater utilization of ambulatory facilities for patients who formerly would have been hospitalized. Today, diagnostic and therapeutic services are offered by a variety of facilities, including hospital outpatient departments, diagnostic and treatment centers, public health centers, and rehabilitation facilities, as well as in offices of private physicians.

Within a short span of years, facilities for ambulatory care have expanded substantially in number and volume of service provided. For example, between 1956 and 1962, the number of acceptable diagnostic and treatment centers in organized clinics or hospital outpatient departments

increased from 2,922 to 4,441. Between 1954 and 1958, visits to organized hospital outpatient departments increased by 30 percent and emergency visits by 81 percent.

The public health center today offers a broad range of preventive health services including: control of communicable disease; public health nursing; sanitary engineering; maternal and child health clinics; immunization clinics; dental health programs; health education; milk, food, and water inspection; school health services; and visiting nurse services. Between 1948 and 1962, the number of primary public health centers increased from 479 to 1,213. Auxiliary centers, which include publicly-owned laboratories and special clinics, increased from 723 to 1,020 over the same period.

Rehabilitation centers have grown rapidly in number since World War II--evidence of increasing public awareness that the handicapped should be restored to the fullest physical, mental, social, vocational, and economic usefulness of which they are capable.

An estimated 2.2 million handicapped people of working age could benefit from vocational rehabilitation to enable them to work in the competitive market, in sheltered workshops, or at home. An additional 270,000 persons, it is also estimated, enter this vocationally handicapped group each year. Today, some 200 rehabilitation centers provide comprehensive, coordinated services,--medical, psychological, social, and vocational--for the long-term or permanently disabled. In addition, hundreds of other facilities and agencies, including general hospitals, treatment centers, nursing homes, insurance companies, churches, labor unions, and fraternal orders, offer or support direct services for the handicapped. Nevertheless, there remains a serious need for additional facilities and services. Some large geographical areas with high density population lack suitable facilities and services. Many disabilities have only limited coverage. Frequently, services are inadequate in extent and in maintenance of quality. Development of needed facilities and services requires sound planning in coordination with that for other health programs.

Medical Education Facilities

Within the past decade, the supply of physicians in the United States have barely kept pace with population growth. Moreover, the number of applicants to medical schools has started to decline. Meanwhile, the demand for medical service by the public has steadily increased. These trends, combined with continuing emphasis on research in all areas of medicine and medical practice, have greatly intensified the need for more physicians and medical scientists.

Pending legislation proposes a 10-year program to relieve critical shortages of professional health personnel. The proposal includes provision of grants to assist in new construction, replacement or rehabilitation of teaching facilities for training medical, dental, and other health personnel; a 5-year program of loans for students of medicine, dentistry,

and osteopathy; and a 3-year extension of the health research facilities construction program. A recent Public Health Service Report, "Medical School Facilities: Planning Considerations and Architectural Guide," provides guidelines for those contemplating the institution of new medical schools and the planning of facilities.

Nursing Education Facilities

Numerous studies have documented the need for an increased supply of all types of nurses. It is estimated that graduations from professional schools of nursing should increase by 50 percent in order to satisfy the Nation's need for nursing service by 1970. Expansion of schools for practical nursing is also needed. Not only must new schools be established, but existing schools must add classrooms, faculty offices, and housing to increase their enrollments.

To avoid duplication of costly educational facilities and to assure sound planning, the Public Health Service proposes to develop and publish a guide for colleges, universities, hospitals, communities and regional groups for planning nursing educational facilities. No current guidelines of this nature are available.

Medical Group Practice Facilities

The problem of effective use of health personnel is probably as important as the problem of increasing their numbers. Numerous advantages of combining the skills of general practitioners and specialists in a group practice arrangement have been demonstrated, including: improvements in the quality of care provided; economies to practitioners and patients alike; more effective utilization of health personnel; and stimulation of voluntary prepayment plans which offer comprehensive health services.

A major obstacle to the development of group practice has been the costs involved in constructing the needed facilities and in providing essential services and equipment. Although loans from private sources may be available in some communities, and loans to profit-making group practice units are available from the Small Business Administration, such loans are generally for short durations, at relatively high interest rates, and require a substantial investment by the sponsoring group.

Research Needs

Research in the effective and efficient use of hospitals and the ways and means of adapting medical and technological changes to patient care has been sporadic and unorganized. Beyond a limited number of studies by foundations, associations and universities, and only in recent years by the Public Health Service, each hospital has attempted to meet its problems alone. All told, probably little more than \$10 million is now spent annually in the area of hospital research.

Modern medical care concepts and practices demand intensified hospital research efforts in areas such as: improved techniques for

determining facility and service needs; functional design of the hospital structure; hospital operating efficiency; hospital organizational patterns; coordination of community facilities with emphasis on the hospital as the focal point of a coordinated community-wide health program; and extension of the hospital into the home through organized home care programs.

Summary of National Goals

In summary, the goals for the future in health facility construction should be to:

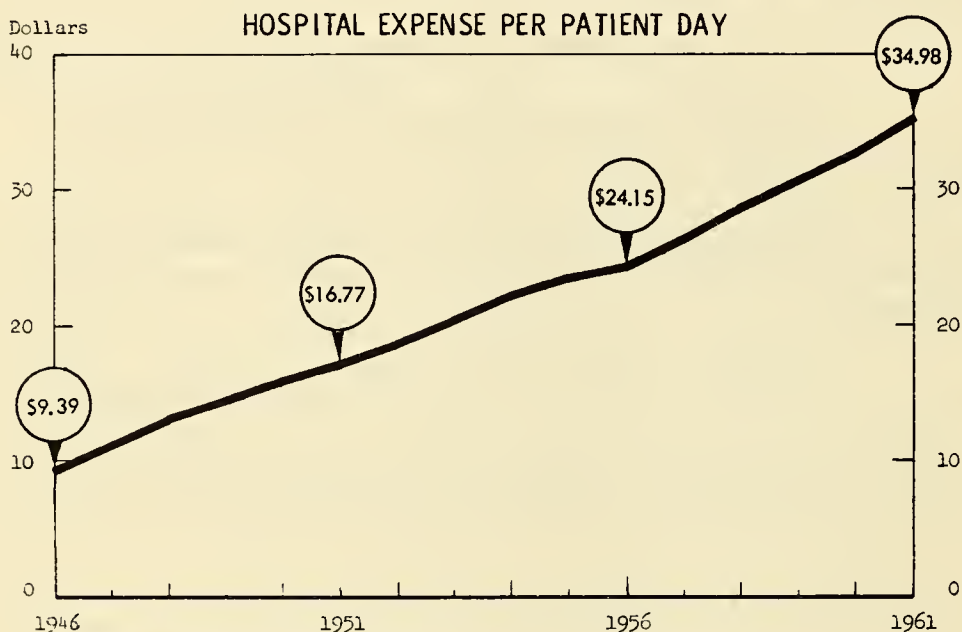
1. Increase substantially the capacity of acceptable facilities for long-term care, i.e., chronic care hospitals and skilled nursing homes;
2. Increase construction of community-oriented mental health facilities;
3. Encourage construction, expansion, and modernization of facilities for the mentally retarded;
4. Support replacement and modernization of older hospitals;
5. Stimulate community planning for redistribution of facilities in metropolitan areas to achieve balanced urban hospital resources;
6. Develop an integrated program of construction and services for all types of facilities within an urban area, according to a community plan;
7. Encourage construction of general hospitals in those remaining general hospital service areas with demonstrated shortages;
8. Provide for enough construction of all types of in-patient facilities to reduce present shortages and keep up with population growth;
9. Continue the construction of necessary public health centers and other outpatient facilities to improve preventive and ambulatory care;
10. Support new construction, replacement or rehabilitation of teaching facilities for training medical, dental, and other health personnel.
11. Expand research in support of (a) efficiency of design and operation of facilities and effective use of personnel; (b) the application of new medical discoveries in diagnosis and treatment to reduce the need for inpatient care; and (c) improved organization of community machinery for continuity of care for patients, between the hospital and related institutions.

HOSPITAL COSTS, 1946-1961

Eugenia Sullivan and Earl E. Huyck

Average hospital expense per patient day in the United States in 1961 rose to about \$35--nearly four times the expense in 1946. The increase over 1960 was 8.5 percent and the annual dollar increase was the largest since 1946. Hospital expense per patient day is an aggregate figure derived by dividing total expenses (including outpatient expenses) by the number of adult inpatient days. Not included in total expenses are those expenses incurred by inpatients but not billed by the hospital, such as the cost of medical and surgical services rendered by the patient's physician.

There are two sources of data that reflect changes in the cost of hospital services. One of these is the series on average hospital expense per patient day, which is computed by the American Hospital Association based on annual surveys of all hospitals accepted for listing by the Association. The other is a series on hospital daily service charges developed by the Bureau of Labor Statistics, U.S. Department of Labor, in connection with the compilation of the Consumer Price Index.



Source: American Hospital Association

Since 1946, according to the American Hospital Association, total expense per patient day in non-Federal short-term general and special hospitals* has increased by 273 percent. The total expense per patient stay increased by 213 percent from \$86 to \$267 between 1946 and 1961, even though the average length of stay decreased by 16 percent in the interim

Miss Sullivan is a Staff Assistant and Dr. Huyck is a Program Analysis Officer in the Office of the Assistant Secretary (for Legislation); U.S. Department of Health, Education, and Welfare. For further information see: (1) American Hospital Association, Hospitals, Part II of Guide Issue, August 1962; and (2) Ethel D. Hoover, Bureau of Labor Statistics, U.S. Department of Labor, "Outlook for Medical Costs in 1962."

*Includes all types of hospitals other than mental and tuberculosis.

A number of factors have contributed to the rapid rise in hospital costs--a rise much sharper than the cost of living in the postwar period. Improved medical technology, including new and expensive drugs and equipment and new medical techniques such as openheart surgery, has raised the cost of hospital care. The most important factor, however, has been the increased payroll expense, which accounted for 62 percent of the total expense of hospital operation in 1961. The payroll expense in short-term hospitals increased by 521 percent between 1946 and 1961.

Historically the pay scales of hospital employees have been considerably below those of other workers. The continuing upward adjustment in hospital pay rates, including the substitution of cash payments for fringe benefits and reduction in the workweek, have been major elements in the considerable rise in payroll expense. The increase in hospital utilization and the usage of complex technical services that hospitals now provide have necessitated increases in the number of employees, and particularly of higher-salaried technical and professional employees.

Percentages Increases in Hospital Costs
for Short-term General and Other Special Hospitals

American Hospital Association Indexes	1946	1961	Increase (percent)
Average length of stay (in days)	9.1	7.6	-16
Total expense			
Per patient day ^{1/}	\$9.39.	\$34.98	273
Per patient stay ^{2/}	\$85.57	\$267.37	213
Number of employees (full-time equivalent) ^{3/}			
Number (in thousands)	505	1,149	128
Per 100 patients	148	235	59
Payroll expense			
Total (in millions)	\$619	\$3,848	521
Percent of total expense	53	62	16
Average payroll expense per employee	\$1,226	\$3,349	173

^{1/} Total expense divided by the number of adult inpatient days.

^{2/} Total expense divided by the number of adult inpatient admissions.

^{3/} Includes full-time personnel plus full-time equivalents of part-time personnel. Excludes residents, interns, and students.

As operating costs have increased, hospitals have had to pass on most of the increase to consumers in the form of higher hospital daily service charges. Since 1946 hospital daily service charges have risen 228 percent--over four times as much as the Consumer Price Index for all items. The hospital daily service charge is the charge to full-pay adult inpatients for routine nursing care, room and board, and minor medical and surgical supplies. The daily service charge usually excludes the costs of laboratory work, X-rays, operating room, and special nursing, which are additional charges on the hospital bill.

According to the Bureau of Labor Statistics, hospital daily service charges for a semi-private room in 20 large cities in the United States in 1961 averaged \$23.08, but ranged from a low of \$14.52 in Houston to a high of \$33.33 (including hospitals charging flat rate for all services) in Cleveland. The BLS figures are based on data collected primarily for calculation of the Consumer Price Index and are not adjusted for comparability; the cost differences among cities may be due to variation in quality of the services priced.

Percentage Increases in Prices
for All Consumer Items and for Hospital Services

Bureau of Labor Statistics Consumer Price Index (1957-59 100)	1946	1961	Increase (percent)
All items	68.0	104.2	53
Medical	60.7	111.3	83
Hospital daily service charge	37.0	121.3	228
Semi-private room	\$7.13	\$23.08	224

Over the whole postwar period (1946-61), prices for medical care increased more rapidly than the Consumer Price Index for all items combined—about 83 percent for medical care as compared with 53 percent for all items. The most distinctive characteristic in the movement of medical care prices has been the relatively slow but continuous upward movement. Of the 180 monthly changes from January 1947 through December 1961, the medical index went up on 168 separate occasions, remained stationary nine times, and decreased only three. The increases for medical care corresponded very closely with the steady upward trend for all services until the last few years when medical care prices rose at a somewhat faster pace. Throughout the past 15 years, however, hospital daily service charges have risen more rapidly than medical care prices generally.

HOSPITAL INSURANCE AND PROPORTION OF BILL PAID BY INSURANCE

Augustine Gentile and Earl E. Huyck

HOSPITAL INSURANCE COVERAGE

Two-thirds of the civilian non-institutional population of the United States was covered by some form of hospital insurance in the latter half of 1959.

The proportion of the population covered by hospital insurance was generally highest in the Northeast and North Central regions and lowest in the South. The proportion covered in the West was between the extremes and somewhat below the national average.

Hospital insurance was held by 72 percent of the population in urban areas as compared with 68 percent in rural-nonfarm areas and 45 percent in farm areas.

Persons in the age range in which the working population is concentrated (25-64) were more likely to have health insurance than children or old people. Among persons age 65 and older, approximately 46 percent were covered by some form of hospital insurance.

In families where the income during the previous 12 months was under \$2,000, approximately 33 percent of the persons had hospital insurance. But in families with the highest income, \$7,000 or more, 84 percent had such insurance.

PROPORTION OF HOSPITAL BILL PAID BY INSURANCE

Among all patients discharged from short-stay hospitals in the two-year period July 1958 through June 1960, 68 percent had some portion of the hospital bill paid by insurance, and 51 percent had three-fourths or more of the bill paid. About three out of four persons who reported some insurance payment had 75 percent or more of the bill paid.

Geographic Region

The proportion of discharges for which some part of the bill was paid by insurance was higher in the Northeast and North Central regions (74 percent) than in the South (64 percent) or West (56 percent).

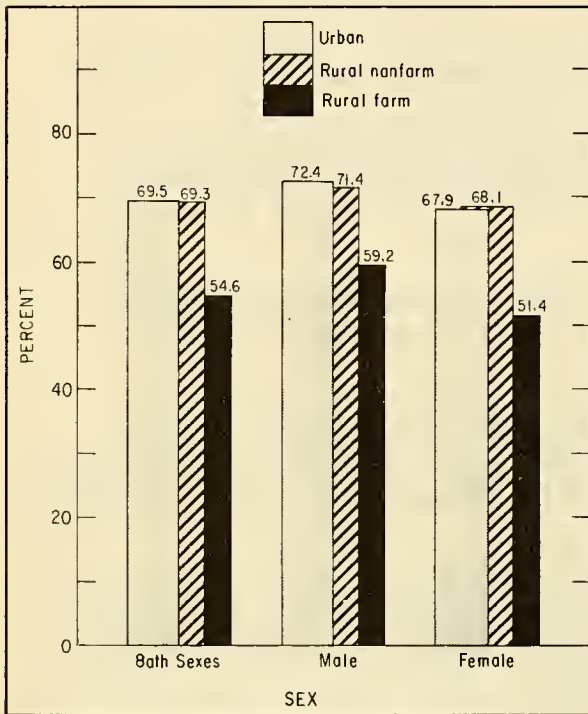
Mr. Gentile is a Statistician in the Health Interview Survey Branch, National Center for Health Statistics; and Dr. Huyck is a Program Analysis Officer in the Office of the Assistant Secretary (for Legislation), U.S. Department of Health, Education, and Welfare. The facts set forth in this digest are from two recent Health Statistics publications of the Public Health Service, U. S. National Health Survey: (1) Interim Report on Health Insurance, PHS Pub. No. 584-B-26, December 1960, based on 19,000 nationwide household interviews conducted during the period July-December 1959; and (2) Proportion of Hospital Bill Paid by Insurance, Patients Discharged from Short-stay Hospitals, PHS Pub. No. 584-B-30, November 1961, based on 75,000 household interviews from July 1958 through June 1960.

Health, Education, and Welfare Indicators, February 1963

Race

About 71 percent of white persons discharged from hospitals had some portion of the bill paid by insurance. For nonwhite persons the rate was 42 percent.

CHARACTERISTICS OF PERSONS WHO HAD PART OR ALL OF HOSPITAL BILL PAID BY INSURANCE



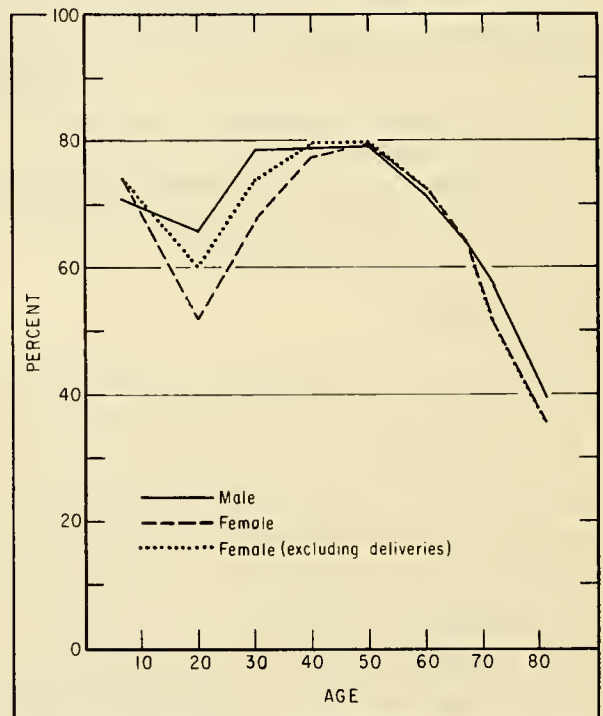
Percent of hospital discharges with some insurance payment for the hospital bill by sex and residence

Age and Sex

Between 70 and 80 percent of persons below age 65 (with the exception of the age group (15-24) had some portion of their hospital bill paid by insurance. Of persons 65 years and over, about 53 percent of men and 49 percent of women had some part of the bill paid. After age 65 the proportion of hospital discharges with some insurance payment dropped sharply, from about 63 percent for both men and women age 65-69 down to 39 percent for men and 36 percent for women age 75 or over.

Urban-Rural Residence

The proportion of hospital discharges for which some part of the bill was paid by insurance was about the same for residents of urban and rural non-farm areas (69 percent). However, the rate for residents of rural farm areas was much lower (55 percent).



Percent of hospital discharges with some insurance payment for the hospital bill by sex and age.

Percent of Persons discharged from short-stay hospitals
who had insurance payments for the hospital bill

Sex and age	Total discharges		Percent of discharges with any insurance payment who had 3/4 or more of the bill paid by insurance
	Percent with any insurance payment for the bill	Percent with 3/4 or more of bill paid by insurance	
<u>Both sexes</u>			
All ages-----	68.0	51.3	75.4
Under 15-----	72.1	58.3	80.9
15-44-----	66.9	50.6	75.6
45-64-----	76.0	58.0	76.3
65+-----	51.2	30.3	59.2
<u>Male</u>			
All ages-----	70.6	55.7	78.9
Under 15-----	70.7	57.0	80.6
15-44-----	74.7	62.2	83.3
45-64-----	75.5	59.1	78.3
65+-----	53.1	33.4	62.9
<u>Female</u>			
All ages-----	66.4	48.7	73.3
Under 15-----	73.9	59.9	81.1
15-44-----	64.5	47.1	73.0
45-64-----	76.4	56.9	74.5
65+-----	49.3	27.3	55.4

Work

About 79 percent of all persons who "usually work" had some part of the hospital bill paid by insurance. Persons age 65 and over who "usually work" had about the same proportion (80 percent) of hospital discharges with some insurance payment of the bill as did younger "usually working" persons. Nearly one-half (45 percent) of "retired" persons age 65 and over had some portion of the bill paid by insurance.

Income

The higher the family income, the larger the proportion of discharges for which some part of the hospital bill was paid by insurance. In families with incomes under \$2,000 a year, two-fifths of the persons discharged reported that at least some part of the hospital bill had been paid by insurance. The rate increased from 59 percent for the \$2,000-\$3,999 group to 79 percent for the \$4,000-\$6,999 group and to 81 percent for the \$7,000 and over group. However, for persons age 65 and over whose annual income was \$7,000 or more the proportion of discharges for which some part of the hospital bill was paid by insurance (51 percent) was the same as that for all income groups age 65 or over.

Percent of discharges with some insurance payment
for the hospital bill by annual family income

Sex and age	Family income					
	All incomes	Under \$2,000	\$2,000-3,999	\$4,000-6,999	\$7,000+	Unknown
Percent						
<u>Both sexes</u>						
All ages-----	68.0	39.6	59.2	79.0	81.0	58.8
Under 15-----	72.1	32.9	59.4	81.1	80.4	71.9
15-44-----	66.9	33.0	54.7	78.0	81.3	51.2
45-64-----	76.0	50.1	71.7	83.8	89.0	69.4
65+-----	51.2	42.7	59.8	63.5	51.1	45.6
<u>Male</u>						
All ages-----	70.6	41.2	62.8	81.7	83.3	64.1
Under 15-----	70.7	31.1	56.4	79.3	83.6	68.5
15-44-----	74.7	45.2	63.0	85.0	85.7	63.8
45-64-----	75.5	45.8	69.6	84.5	87.6	66.5
65+-----	53.1	39.5	62.2	65.7	58.0	54.1
<u>Female</u>						
All ages-----	66.4	38.6	57.1	77.5	79.5	56.1
Under 15-----	73.9	35.5	63.3	83.2	77.0	75.5
15-44-----	64.5	29.3	52.0	75.9	79.8	47.4
45-64-----	76.4	53.4	73.7	83.2	90.7	71.0
65+-----	49.3	45.8	56.8	61.0	42.5	40.1

PART III

CURRENT AND EMERGING ISSUES AND OPPORTUNITIES

Education

EDUCATIONAL ENROLLMENTS, 1962-63

Kenneth A. Simon

Total for the School Year

Enrollment in the Nation's public and private schools from kindergarten through college, increasing for the 18th consecutive year, will reach a new all-time high of 51.3 million in the 50 States and the District of Columbia in the school year 1962-63. This is an increase of 2.0 million over the enrollment of 49.3 million for the 1961-62 school year.

Elementary and Secondary Schools

Anticipated enrollments in public and nonpublic schools from kindergarten through Grade 8 are estimated at 35.0 million, an increase of 800,000.

In Grades 9 through 12, the increase is expected to be 900,000--from 10.8 to 11.7 million.

Rising enrollments in kindergarten and elementary and secondary schools are due chiefly to the increased number of births since 1946.

An estimated 1,744,000 classroom teachers will be needed by the public and nonpublic elementary and secondary schools, 3.6 percent more than the 1,684,000 employed in 1961-62.

Higher Education

In institutions of higher education, both public and private, an enrollment increase of 300,000--from 4.3 to 4.6 million--is anticipated.

So far the steadily mounting college enrollments have resulted largely from the growing interest in attending college. Part of the increase in enrollments since 1959, however, is attributable to increases in births during the years 1940-43. Enrollments will increase substantially commencing about 1965 as the postwar children begin to reach college age.

Supporting Tabulations

On the following two pages are tabulations of total enrollments by level and higher education degree credit enrollments by States.

Dr. Simon is the Chief of the Reference, Estimates, and Projections Section; Office of Education, U. S. Department of Health, Education, and Welfare. The enrollment estimates presented here are for the entire school year, as contrasted with opening (fall) enrollment data.

Estimated Total Educational Enrollments, 1961-62 and 1962-63^{1/}

<u>Grade Level and Type of School</u>	<u>School Year Enrollments (millions)</u>	
	<u>1961-62</u>	<u>1962-63</u>
Total, elementary, secondary, and higher education.....	49.3	51.3
<u>Kindergarten through Grade 12</u>		
Public school system (regular full-time).....	38.2	39.7
Nonpublic schools (regular full-time).....	6.5	6.7
Other schools ^{2/}	.3	.3
Total Kindergarten through Grade 12.....	45.0	46.7
<u>Kindergarten through Grade 8</u>		
Public school system (regular full-time).....	28.7	29.4
Nonpublic schools (regular full-time).....	5.3	5.4
Other schools ^{2/}	.2	.2
Total Kindergarten through Grade 8.....	34.2	35.0
<u>Grades 9 through 12</u>		
Public School System (regular full-time).....	9.5	10.3
Nonpublic schools (regular full-time).....	1.2	1.3
Other schools ^{2/}	.1	.1
Total Grades 9 through 12.....	10.8	11.7
<u>Higher Education</u>		
Universities, colleges, professional schools, junior colleges, normal schools, and teachers colleges (degree-credit enrollment).....	4.3	4.6

^{1/} The estimates for 1962-63 reflect fall 1961 enrollment statistics and are derived from the increase expected from population changes combined with the long-run trend in school enrollment rates of the population. Nonpublic elementary and secondary school data are based on a sample survey.

^{2/} Includes Federal schools for Indians, Federally-operated elementary-secondary schools on posts, model and practice schools in teacher training institutions, subcollegiate departments of colleges, and residential schools for exceptional children.

State	Higher Education Degree Credit Enrollment, Fall 1961 ^{1/}					
	Total		Full-Time		Part-Time	
	Number	Percent of U.S. Total	Number	Percent of U.S. Total	Number	Percent of U.S. Total
UNITED STATES ^{2/} (50 States and D.C.)	3,860,643	100.00	2,713,901	100.00	1,146,742	100.00
Alabama.....	47,967	1.24	39,011	1.44	8,956	0.78
Alaska.....	2,990	0.08	827	0.03	2,163	0.19
Arizona.....	38,239	0.99	23,755	0.88	14,484	1.26
Arkansas.....	27,719	0.72	23,742	0.87	3,977	0.35
California.....	499,505	12.95	277,388	10.23	222,117	19.37
Colorado.....	49,707	1.29	43,244	1.59	6,463	0.56
Connecticut.....	53,319	1.43	35,070	1.29	20,249	1.77
Delaware.....	8,002	0.21	5,002	0.18	3,000	0.26
District of Columbia	46,895	1.21	22,874	0.84	24,021	2.09
Florida.....	79,660	2.06	57,121	2.10	22,539	1.97
Georgia.....	51,955	1.35	44,264	1.63	7,691	0.67
Hawaii.....	11,697	0.30	8,488	0.31	3,209	0.28
Idaho.....	12,412	0.32	10,156	0.37	2,256	0.20
Illinois.....	216,577	5.61	136,211	5.02	80,366	7.01
Indiana.....	105,294	2.73	82,839	3.05	22,455	1.96
Iowa.....	61,154	1.59	53,088	1.96	8,066	0.70
Kansas.....	56,148	1.45	44,565	1.64	11,583	1.01
Kentucky.....	51,784	1.34	38,232	1.41	13,552	1.18
Louisiana.....	62,312	1.61	50,740	1.87	11,572	1.01
Maine.....	13,687	0.35	11,677	0.43	2,010	0.18
Maryland.....	59,931	1.55	36,262	1.34	23,669	2.06
Massachusetts.....	138,167	3.58	103,271	3.81	34,896	3.04
Michigan.....	169,822	4.40	115,451	4.25	54,371	4.75
Minnesota.....	83,174	2.15	66,424	2.45	16,750	1.46
Mississippi.....	38,572	1.00	35,492	1.31	3,080	0.27
Missouri.....	88,790	2.30	67,846	2.50	20,944	1.83
Montana.....	13,869	0.36	12,576	0.46	1,293	0.11
Nebraska.....	33,434	0.87	25,824	0.95	7,610	0.66
Nevada.....	4,738	0.12	2,897	0.11	1,841	0.16
New Hampshire.....	13,624	0.35	11,342	0.42	2,282	0.20
New Jersey.....	92,727	2.40	51,503	1.90	41,224	3.59
New Mexico.....	19,253	0.50	12,671	0.47	6,582	0.57
New York.....	370,619	9.61	215,398	7.95	155,221	13.54
North Carolina.....	77,481	2.01	67,109	2.47	10,372	0.90
North Dakota.....	14,201	0.37	13,091	0.48	1,110	0.10
Ohio.....	188,016	4.87	130,729	4.82	57,287	5.00
Oklahoma.....	59,623	1.54	48,710	1.79	10,913	0.95
Oregon.....	47,786	1.24	35,406	1.30	12,380	1.08
Pennsylvania.....	204,401	5.29	150,256	5.54	54,145	4.72
Rhode Island.....	19,842	0.51	14,741	0.54	5,101	0.44
South Carolina.....	32,749	0.85	28,814	1.06	3,935	0.34
South Dakota.....	15,270	0.40	12,687	0.47	2,583	0.23
Tennessee.....	64,579	1.67	55,775	2.06	8,804	0.77
Texas.....	198,784	5.15	145,549	5.36	53,235	4.64
Utah.....	35,574	0.92	29,437	1.08	6,137	0.54
Vermont.....	10,053	0.26	9,649	0.36	404	0.04
Virginia.....	61,908	1.60	45,939	1.69	15,969	1.39
Washington.....	70,743	1.83	52,715	1.94	18,028	1.57
West Virginia.....	31,610	0.82	24,550	0.90	7,060	0.62
Wisconsin.....	81,773	2.12	64,757	2.39	17,016	1.48
Wyoming.....	7,117	0.18	5,353	0.20	1,764	0.15
U.S. Service Schools	13,390	0.35	13,383	0.49	7	*

^{1/} The breakdown of total enrollments into full-time and part-time enrollment was estimated for a few institutions whose enrollments represented only 1.8 percent of total enrollments. ^{2/} Includes U. S. Service Schools.

EDUCATIONAL ATTAINMENT AND FAMILY BACKGROUND

Florence Campi

According to a survey taken by the Census Bureau in October 1960, there were 4.7 million men 20-24 years old in the United States. Of this number, 1.7 million had either graduated from college or had some college attendance.

The survey reveals a relationship between the level of education attained by young people and certain factors in their family background.

There is a direct relationship between the college attendance of young men and the education of their fathers.

College enrollment rates of men in their early twenties whose fathers were college graduates are several times as large as those for persons of the same age whose fathers never finished high school.

When the fathers had completed college, 88 percent of the sons 20-24 years of age had graduated from college or had some college attendance.

In contrast, when the father had completed only high school, 65 percent of the sons had graduated from college or had some college attendance.

In the nonwhite group where the father did not graduate from high school, only 7 percent of the children 16-24 years of age were enrolled in college.

However, in the nonwhite group where the father did graduate from high school, 18 percent of the children 16-24 years were enrolled in college.

There is also a direct relationship between high school graduation of young men and education of their fathers.

Where the fathers had graduated from high school, 92 percent of the sons had graduated from high school including 65 percent who had some college attendance.

But when the fathers had not completed high school, only 57 percent of the sons graduated from high school including 23 percent who had some college attendance.

Educational Attainment is Related to Family Income.

Among the families whose income was less than \$5,000 a year, 55 percent of the children 16-24 years old had graduated from high school but only 19 percent went on to college.

Where the families had an income of \$10,000 or more per annum, 87 percent of the children had graduated from high school and 60 percent continued on to college.

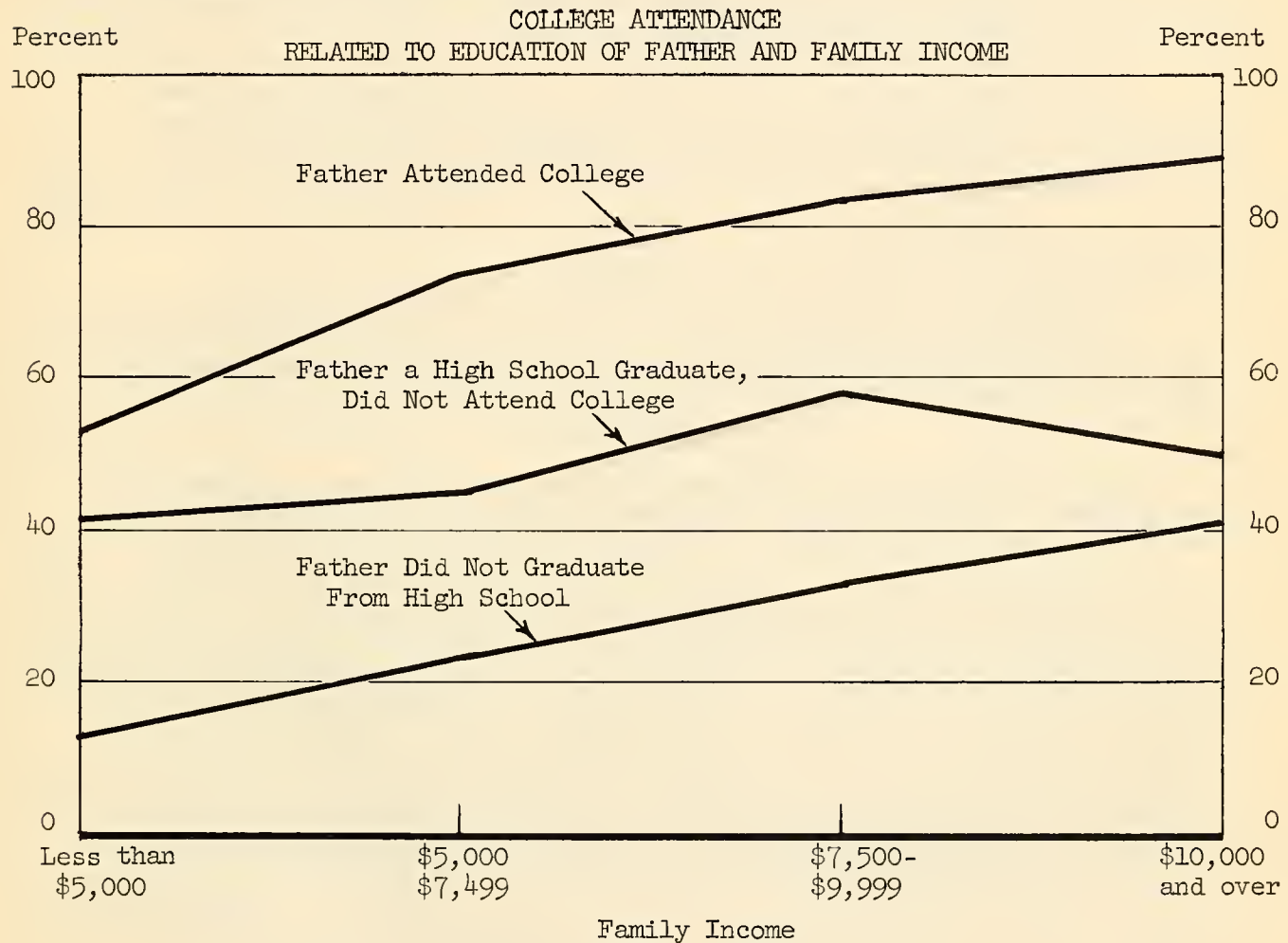
Mrs. Campi is the Reports Assistant, Office of Program Analysis, Office of the Assistant Secretary (for Legislation), U. S. Department of Health, Education, and Welfare. Based on U. S. Department of Commerce, Bureau of the Census; School Enrollment, and Education of Young Adults and Their Fathers: October 1960 by Dr. Charles B. Nam in Current Population Reports, Series P-20, No. 110, July 24, 1961.

Health, Education, and Welfare Indicators, February 1962

The educational level which a person attains is a product of both the education of the father and the family income.*

Where the father did not graduate from high school and the family income was less than \$5,000 only 13 percent of the children had some college attendance.

In contrast, where the father graduated from college and the family income was \$10,000 or more, 89 percent of persons aged 16-24 years old had some college attendance.



*College attendance is also related to the occupation of the father. This relationship is indicated in the U. S. Department of Health, Education, and Welfare; Office of Education; Cooperative Research Monograph No. 8, "Factors Related to College Attendance," which states "...High school seniors whose fathers (a) were in executive or professional occupations, (b) owned or managed businesses, or (c) did office or sales work were much more likely to attend college than the seniors whose fathers (a) owned or managed farms, (b) were factory workers, or (c) were in the skilled or semi-skilled trades."

LIMITED EDUCATIONAL ATTAINMENT: EXTENT AND CONSEQUENCES

Edward W. Brice and Earl E. Huyck

Persons with low educational attainment have great difficulty in meeting the economic and social needs of modern society. They have limited adaptability to changing requirements for employment, and they frequently are rejected for military service. Those who lack an education extending beyond elementary school are deprived of many opportunities for personal development and participation in community affairs. Often they cannot avoid unemployment and dependency.

Persons who have less than 8 years of formal schooling thus lack, by and large, the background for effective performance as employees and as citizens. For these reasons they are frequently called "functional illiterates." *

Adults With Less Than Eight Years of School

According to the 1960 Census of Population some 22.1 million persons aged 25 and over--22.2 percent of the adult population--had completed less than 8 years of schooling. Of this number 11.5 million were men and 10.6 million were women.

These "functional illiterates" are concentrated mainly in the following groups: (1) older persons, both white and nonwhite; (2) persons living on farms, especially Negroes; (3) persons with rural backgrounds who

Dr. Brice is the Director of the Adult Education Branch, Office of Education, and Dr. Huyck is a Program Analysis Officer in the Office of the Assistant Secretary (for Legislation). Based on U. S. Department of Commerce, Bureau of the Census, U. S. Census of Population: 1960, General Social and Economic Characteristics, Final Report PC(1) Series of State volumes; and "Literacy and Educational Attainment: March 1959," Series P-20, No. 99, February 4, 1960. U. S. Department of Labor, Bureau of Labor Statistics, "Educational Attainment of Workers 1959," Monthly Labor Review, February 1960.

* "Functional illiteracy" may be contrasted with "illiteracy." The Census Bureau defines an illiterate as "a person who cannot both read and write a simple message either in English or any other language." The ability to read and write is now shared by nearly all persons 14 years old or older; the relatively small number of illiterates is concentrated mostly in the older age groups. Because of the demands of present-day family, community, and national life, this restricted definition of illiteracy is of limited usefulness. More meaningful today is the concept of "functional illiteracy," which is related to low educational attainment as measured by number of years of school completed.

Health, Education, and Welfare Indicators, April 1962
Revised March 1963

have moved to urban centers, including Puerto Rican migrants; and (4) migrant farm workers and other disadvantaged groups, including Spanish-speaking persons in the western and southwestern United States.

Data from the 1960 Census of Population show that:

- There are about one million Puerto Ricans in the United States. Some 269,000 of those who are 25 years of age or older live in the five boroughs of New York City. Of these, 53 percent had completed less than 8 years of education. Similar percentages are reported for Jersey City and Philadelphia.

- A large number of persons with Spanish surnames live in the five southwestern States. A substantial proportion of them have had less than 8 years of school. Of the 101,000 such persons living in San Antonio, Texas, the rate was 69 percent.

- In the United States territories of Guam, Puerto Rico, and the Virgin Islands there are 676,000 persons 25 years of age and older with less than 8 years of school completed. The rate varies from 39 percent in Guam, to 61 percent in the Virgin Islands, and 71 percent in Puerto Rico.

Distribution of Functional Illiteracy Among the States

The problem of limited educational attainment is not, however, limited to particular areas or population groups. Rather it is national in scope. (See accompanying chart and maps.) In New York State the number of adults with less than 8 years of schooling is nearly 2,000,000. In Illinois there are 1,048,000 and in California, 1,300,000. The corresponding numbers in Kentucky, Michigan, New Jersey, and Ohio exceed 500,000, while in Indiana, Maryland, Massachusetts, Missouri, Oklahoma, West Virginia, and Wisconsin the numbers range from 304,000 to over 500,000.

Consequences of Limited Educational Attainment

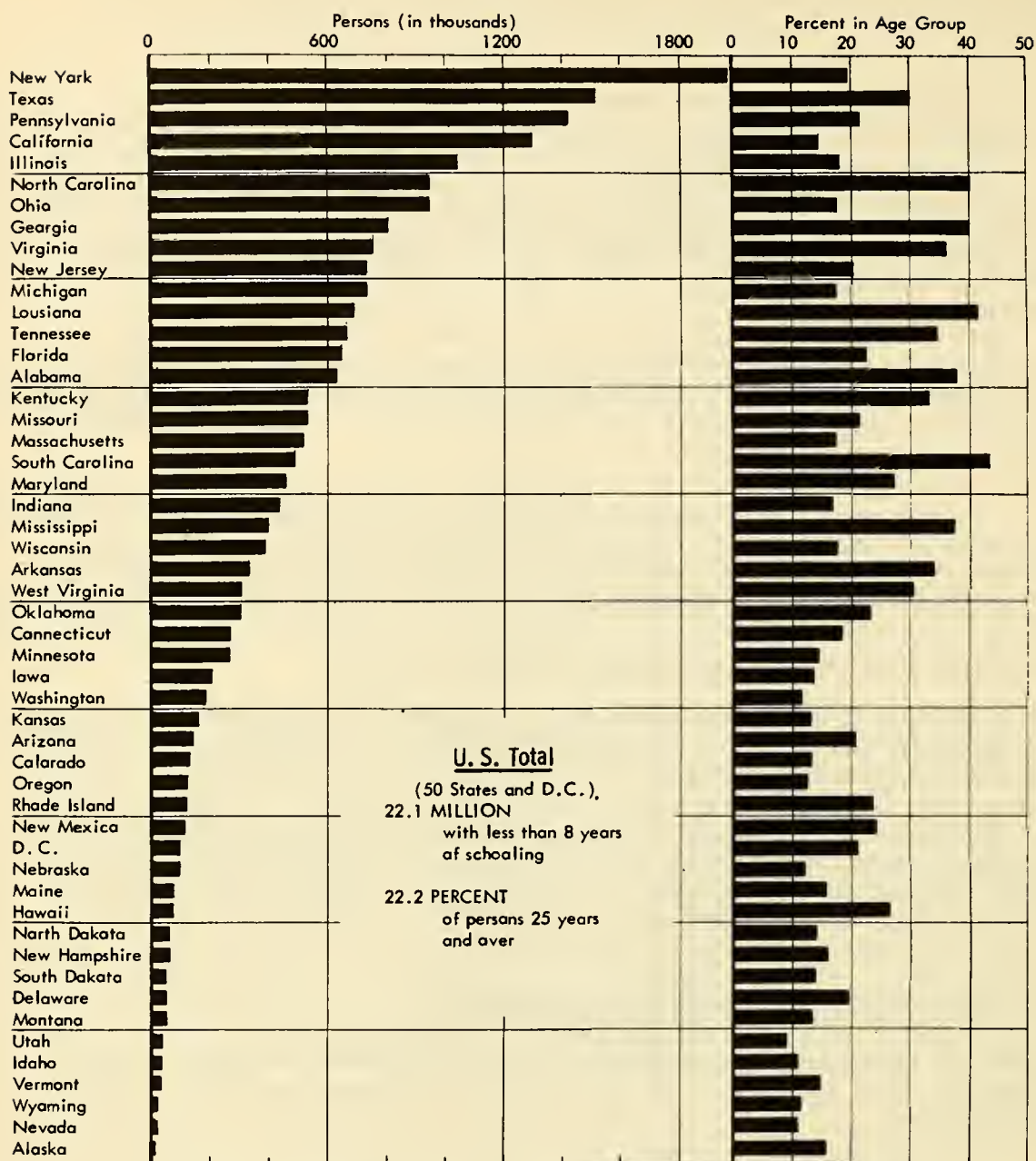
Lack of schooling results in lower earning capacity, higher rates of unemployment, more dependence on public aid, and higher rejections for military service.

1. Occupation and Earnings

A direct relationship exists between an adult's educational attainment, his occupation, and, consequently, his earnings. The amount of formal schooling a person has received is a major determinant of his occupational group.

Among men 18 years old and over in 1959, 60 percent of the college graduates were in professional and technical fields, and about

Persons 25 and Over with Less Than 8 Years of Schooling



Source: U.S. Department of Health, Education, and Welfare based on 1960 census data supplied by the U.S. Department of Commerce, Bureau of the Census.

3
C
if
no
f
15
78
10
10.5

20 percent were managers, officials, or proprietors. Among men who completed high school, but did not go beyond, a majority were found in three occupation groups--craftsmen; operatives; and managers, officials, or proprietors. Those with some high school, but lacking four complete years, and men who finished elementary school, but who did not go on to high school, were most likely to have become operatives or craftsmen. Those with lesser amounts of education were most usually found--when employed at all--in farm, service, and unskilled laboring jobs.

Of all employed men, as of 1957, in the age group 35-54 who had completed less than eight years of elementary school, 92 percent earned less than \$6,000 per year. In contrast, 65 percent of high school graduates and only 29 percent of college graduates had income below this level.

Employed workers with an eighth grade education or less have 65 percent of the incomes between \$1,000 and \$1,500, and 61 percent of the incomes between \$1,500 and \$2,500.

2. Unemployment and Underemployment

Unskilled workers have the highest rates of unemployment and the lowest average level of education. A Department of Labor study for March 1959 showed an unemployment rate of 10.0 percent for workers with under 5 years completed, a rate of 9.8 percent for those with 5 to 7 years schooling, 4.8 percent for high school graduates and 1.8 percent for college graduates. These rates had not changed substantially by March 1962.

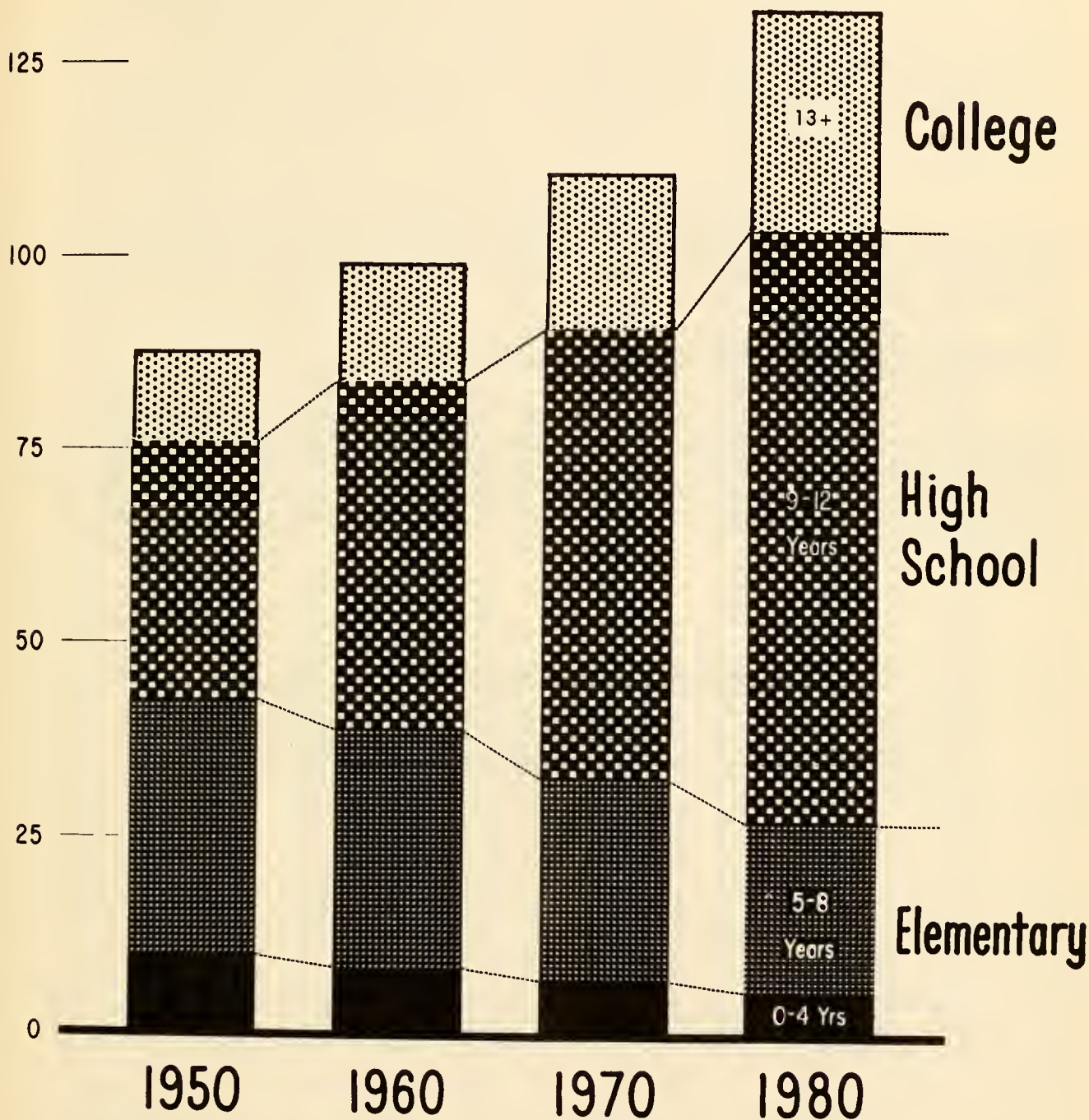
The rate of unemployment in 1962 among proprietors, managers, professional and technical personnel was between one and two percent. Clerical and sales workers were unemployed at the rate of approximately four percent. But semi-skilled workers were out of work at the rate of 7 1/2 percent and unskilled workers at the rate of about 12 percent.

3. Public Assistance

Recipients of public assistance are more likely to be persons of low educational attainment. A 1957 study in New York, for example, revealed that almost a fifth of the mothers on the aid to dependent children rolls had not gone beyond the fifth grade. This study further showed that among families receiving general assistance half the family heads had completed no more than six years of schooling. Illinois reported in 1960 that a fifth of their ADC mothers had not gone beyond the sixth grade. In Louisiana, in 1954, half the ADC mothers and three-fourths of the fathers in the home had received only a fifth grade education or less.

Projected Educational Attainment

Millions of Persons
25 Years and Older



Source: U. S. Department of Health, Education, and Welfare based on data appearing in *Current Population Reports, Population Characteristics*, Series P-20, No. 91, published by the U. S. Department of Commerce, Bureau of the Census. Projections used were Series II for population and Series A for educational levels.

4. Military Service

In World War II, some 400,000 illiterates were accepted for military service. The armed forces provided these men with the educational fundamentals necessary for useful service. Another 300,000 illiterates--equal to twenty army divisions--were rejected completely.

During the Korean War over 19 percent of all recruits were rejected from military service on grounds of educational deficiencies. Experience showed that many of these men could learn, but overcoming their previous educational deprivations was costly and time-consuming. Draft registrants rejected for "mental reasons," including educational deficiencies, ranged from 56 to 39 percent in the four highest States. Ten other States had rejection rates exceeding 21 percent.

From July 1950 to September 1961, over 900,000 draft registrants out of 6 million examined were rejected on the basis of a mental test alone. This number was almost as many as were disqualified on medical grounds. Low educational attainment was the largest single reason for rejection.

Projected Educational Attainment of the Population

Although lower educational attainment is most prevalent among older persons, the problem will continue for many decades. The Census Bureau estimates that by 1980 there will still be more than 5 million persons 25 years of age and older with less than 5 years of education completed and 21.5 million with less than 8 years if present trends continue (Chart and Table).

Projected Educational Attainment				
Years of school completed	Millions of persons 25 years and over			
	1950	1960	1970	1980
13+	11.9	15.7	20.4	28.2
9-12	33.3	44.8	57.3	76.0
5-8	32.6	30.5	26.0	21.5
0-4	9.8	8.0	6.4	5.2
TOTAL	87.5	99.0	110.0	130.8

**PERSONS 25 YEARS OLD AND OVER
WITH LESS THAN 8 YEARS OF SCHOOL COMPLETED**

(As of April 1, 1960 Census)

State	Resident population 25 years and over ^{1/}						
	Total (000's)	Less than 8 years of school completed ^{2/}			Median school years completed		
		Number (000's)	Percent of age group	Rank of State	Total	White	Nonwhite
TOTAL.....	100,375	22,732	22.6				
UNITED STATES (50 States and D.C.)	99,438	22,056	22.2	-	10.6	10.9	8.2
Alabama.....	1,670	643	38.5	47	9.1	10.2	6.5
Alaska.....	105	16	15.7	17	12.1	12.4	6.6
Arizona.....	661	138	20.9	30	11.3	11.7	7.0
Arkansas.....	964	331	34.4	43	8.9	9.5	6.5
California.....	8,869	1,300	14.7	13	12.1	12.1	10.5
Colorado.....	941	126	13.4	10	12.1	12.1	11.2
Connecticut.....	1,482	274	18.5	26	11.0	11.1	9.1
Delaware.....	246	48	19.6	28	11.1	11.6	8.4
District of Columbia	461	98	21.2	31	11.7	12.4	9.8
Florida.....	2,845	650	22.8	34	10.9	11.6	7.0
Georgia.....	2,015	811	40.3	48	9.0	10.3	6.1
Hawaii.....	309	82	26.7	38	11.3	12.4	9.9
Idaho.....	340	37	10.8	2	11.8	11.8	9.6
Illinois.....	5,808	1,048	18.0	24	10.5	10.7	9.0
Indiana.....	2,550	432	17.0	19	10.8	10.9	9.0
Iowa.....	1,541	211	13.7	11	11.3	11.3	9.5
Kansas.....	1,216	159	13.1	8	11.7	11.8	9.6
Kentucky.....	1,610	535	33.2	42	8.7	8.7	8.2
Louisiana.....	1,639	688	41.9	50	8.8	10.5	6.0
Maine.....	534	84	15.7	16	11.0	11.0	10.7
Maryland.....	1,693	461	27.2	39	10.4	11.0	8.1
Massachusetts.....	3,011	523	17.4	20	11.6	11.6	10.3
Michigan.....	4,219	739	17.5	21	10.8	11.0	9.1
Minnesota.....	1,845	269	14.6	14	10.8	10.8	9.9
Mississippi.....	1,065	403	37.8	46	8.9	11.0	6.0
Missouri.....	2,493	535	21.5	32	9.6	9.8	8.7
Montana.....	356	47	13.3	9	11.6	11.7	8.7
Nebraska.....	791	96	12.2	7	11.6	11.7	9.6
Nevada.....	160	17	10.9	3	12.1	12.2	8.8
New Hampshire.....	345	56	16.3	18	10.9	10.9	11.7
New Jersey.....	3,600	739	20.5	29	10.6	10.8	8.0
New Mexico.....	445	108	24.2	37	11.2	11.5	7.1
New York.....	10,124	1,969	19.4	27	10.7	10.8	9.4
North Carolina.....	2,307	956	41.4	49	8.9	9.8	7.0
North Dakota.....	324	59	18.4	25	9.3	9.3	8.4
Ohio.....	5,378	954	17.7	22	10.9	11.0	9.1
Oklahoma.....	1,300	304	23.4	35	10.4	10.7	8.6
Oregon.....	996	121	12.1	6	11.8	11.8	9.9
Pennsylvania.....	6,606	1,425	21.6	33	10.2	10.3	8.9
Rhode Island.....	498	118	23.6	36	10.0	10.0	9.5
South Carolina.....	1,136	493	43.4	51	8.7	10.3	5.9
South Dakota.....	360	50	13.8	12	10.4	10.5	8.6
Tennessee.....	1,912	666	34.9	44	8.8	9.0	7.5
Texas.....	5,031	1,514	30.1	40	10.4	10.8	8.1
Utah.....	419	38	9.0	1	12.2	12.2	10.1
Vermont.....	213	31	14.6	15	10.9	10.9	10.5
Virginia.....	2,083	756	36.3	45	9.9	10.8	7.2
Washington.....	1,577	185	11.7	5	12.1	12.1	10.5
West Virginia.....	1,000	305	30.5	41	8.8	8.8	8.4
Wisconsin.....	2,175	387	17.8	23	10.4	10.4	9.0
Wyoming.....	174	20	11.6	4	12.1	12.1	9.3
Guam.....	28	11	38.8				
Puerto Rico.....	925	656	70.9				
Virgin Islands.....	14	9	61.2				

Source: U. S. Department of Health, Education, and Welfare; based on U. S. Department of Commerce, Bureau of the Census; U. S. Census of Population: 1960, General Social and Economic Characteristics, Final Report, PC(1) series for each State. 1/ Resident population includes institutional population but excludes armed forces abroad. 2/ Based on years of "regular" schooling completed through formal education obtained in public and private kindergartens and graded schools.

LIBRARY SERVICES

Wilbur J. Cohen and John G. Lorenz

The Nation's investment in libraries is a most direct and effective investment in our vital intellectual resources. The public library, for example, has served as both school and college for millions of Americans. Increasingly, the well-stocked library is a source of books and materials required to keep abreast of technological and professional advances in a wide range of essential occupations. Good, modern public libraries play an important role in the whole spectrum of adult and continuing education, with tangible benefits to business, industry, and the professions.

Our major library needs today are not limited to rural areas. About 128 million of our people have inadequate library services or none at all, and approximately half of these are in urban areas. Nor are needs limited to public libraries. About two-thirds of all the elementary schools in the country are without libraries, and many college libraries are inadequate. Such inadequate school and college libraries place additional, and often very severe, burdens on the public libraries.

Major factors influencing the development of libraries in general in the 1960's are: (1) increased demands for library services related to population and economic growth, (2) shortages of library manpower, (3) the construction and equipping of physical facilities, and (4) the increasing volume and cost of library materials.

Population and Economic Growth

The 69 million children born since World War II (1946-62)--more than one-third of the total population at present--create needs for pre-school, school, and college-related reading materials and libraries. The greater part of postwar babies are now in elementary and secondary schools and about 1965 will begin to reach college age.

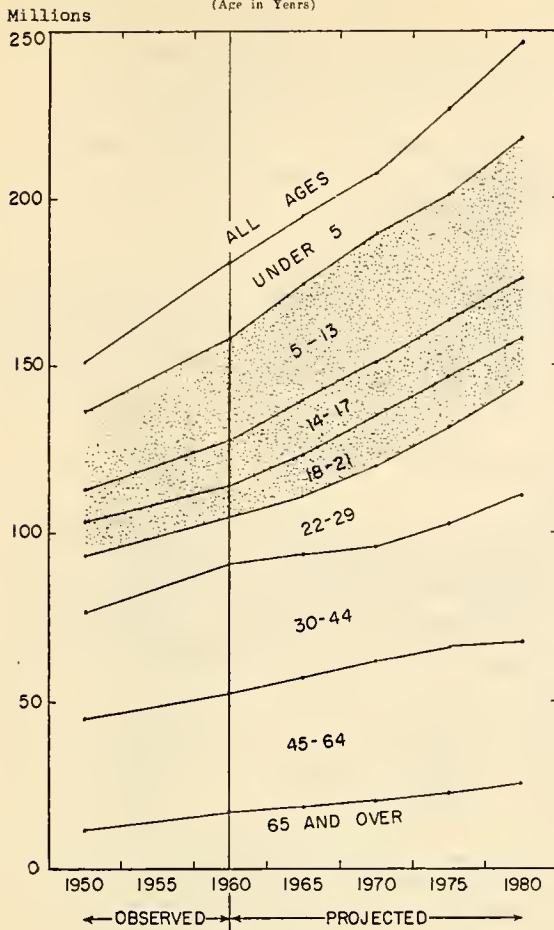
The population of the United States--187 million in 1962 and growing by three million persons each year--may reach a level of 250 million by 1980. More than three-fourths of our population may then live in urban

Mr. Cohen is Assistant Secretary for Legislation, U.S. Department of Health, Education, and Welfare; Mr. Lorenz is Director, Library Services Branch, U.S. Office of Education. Data are based on publications and studies of the Library Services Branch including: The Cost of Library Materials: Price Trends of Publications; State Plans Under the Library Services Act with supplements; and reports on public libraries, public school libraries, and college and university libraries. Library standards are those of the American Library Association, Chicago 11, Illinois.

Health, Education, and Welfare Indicators, December 1962

Population by Age, 1950-1980

(Age in Years)



Source: Hauser and Taitel, "Future of Library Service: Demographic Aspects and Implications," *Library Trends*, July 1961, University of Illinois Graduate School of Library Science. Projections based upon U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 187.

areas--as many as there are in the entire United States today. According to the trend projections of the Office of Education, enrollment in the elementary and secondary schools may increase over 23 million, or 55 percent, between 1960 and 1980. By the fall of 1975, as many as 8.6 million persons--or half of the persons of college age--may be college students.

The postwar children will also become the Nation's workers in the next few years. The labor force is expected to increase from 74 million in 1961 to 80 million in 1965 and 95 million in 1975. To remain competitive in domestic and world markets, the Nation's industrial plant is geared to rapid evolution in its processes and procedures. The demands for research, and the allocations of personnel and expenditures for research, will rise accordingly. These developments underscore the needs for expanding employment opportunities and for raising the level of skills of the labor force through training and retraining.

The already substantial contribution of libraries to the research effort will be enhanced through electronic data processing

in retrieving stored information rapidly. Such experimentation is now underway at Western Reserve University in the field of educational research.

But more basically, libraries complement each level of the educational and training process. Libraries can also supply the cultural materials to make meaningful the increased leisure time that is expected. No one type of library has the sole responsibility for contributing to the broad objective of producing mature citizens, capable of acquiring and applying knowledge in the workaday world of science, business, industry, and government, in family living, and in other aspects of human endeavor. Good libraries for people of all ages and all levels of educational attainment are essential to reach this objective.

Library Manpower and Professional Training

Books and buildings alone do not make a library. Men and women of high professional ability are required, with sufficient supporting staff, to plan and carry out library development and services. The lack of adequately trained professional library staff is critical. Administrators of every type of library are concerned with professional vacancies--numbering more than 4,500 at present--and with the general lack of qualified staff to advance library service to at least minimum standards.

There are now about 59,000 professional librarians serving in various types, of libraries, including an estimated 10,000 in special libraries. According to American Library Association standards, about 103,000 additional professional librarians are needed for minimal service in public, school, and college libraries.

Professional Library Personnel Requirements
(In thousands)

Type of library	Libraries	Full-time professional librarians		
		Employed	Needed according to American Library Association standards	
			Total	Additional
All	58.8	58.6 ^{1/}	152.0	103.4
Public	8.2	19.5	28.0	8.5
School ^{2/}	41.0	19.4	111.8	92.4
College & university	2.0	9.7	12.2	2.5
Special (estimated)	7.6	10.0	---	---

^{1/} Exclude 15,000 to 20,000 part-time or partly trained librarians.

^{2/} Data are for centralized public schools serving 150 students or more, representing about 97 percent of the total public school enrollment.

The number of men in library work has been increasing during the past five years, but their proportion of the total number entering the profession has remained at one-fourth.

There are two major categories of professional library education institutions offering degree programs: those accredited by the American Library Association (31) and others (68).

The ALA-accredited institutions offer a fifth-year program normally leading to a Master's degree in library science and most also offer training below the Master's level. Seven have doctoral programs. The non-ALA-accredited institutions may offer a Bachelor's program with a major in library science, a Master's program, or both. While the ALA-accredited institutions provide training for various types of libraries, the others generally train only for school and public librarianship.

There has been a definite upward trend in librarian education during the past decade, with the total number of degree-granting institutions increasing 40 percent from 70 in 1951-52 to 98 in 1960-61. The number of degrees granted has increased at a similar rate, from 1,721 to 2,371, or 38 percent. Of the degrees awarded in 1960-61, the ALA-accredited institutions awarded 1,675, or 71 percent.

School year ending	Library Science Degrees									
	Total		Institutions granting library science degrees							
			Accredited by the American Library Association ^{1/}				Other			
			Degrees conferred				Degrees conferred			
	Schools	Degrees	Num- ber	Number	Per- cent of to- tal	Aver- age num- ber per school	Num- ber	Number	Per- cent of to- tal	Aver- age num- ber per school
1952	70	1,721	---	---	---	---	---	---	---	---
1955	84	1,827	30	1,351	73.9	45	54	476	26.1	8.8
1959	95	1,967	30	1,350	68.6	45	65	617	31.4	9.4
1960	98	2,262	30	1,430	63.2	47.6	68	832	36.8	12.2
1961	98	2,371	30 ^{2/}	1,675	70.6	55.8	68	696	29.4	10.2

^{1/} Although ALA standards of accreditation for the fifth year Master's program were approved July 13, 1951, evaluation and approval of all the 30 schools included above was not completed until 1958-59.

^{2/} 31 schools as of 1961-62.

Physical Facilities

The construction and maintenance of library facilities represent an important cost item in the provision of adequate library services. The era of Carnegie grants for public library buildings has long since passed. In March 1962 the U. S. Office of Education estimated the median age of public library buildings at 53 years of age. Thirty percent were probably built before 1910; 85 percent, before 1920; and only 4 percent, in the last 20 years. The Library Services Act, passed by Congress in 1956 in order to stimulate rural library development, does not provide funds for the purchase or erection of buildings or the purchase of land.

The Office of Education projects the need for the construction of public libraries during this decade and the next at \$528 million:

Needed Public Library Construction (in millions of dollars)

Places	1960-69	1970-79
10,000 population and over	137.1	193.1
Below 10,000 population	81.9	115.5
Total	219.0	308.6

Although there are no current statistics on school library facilities and equipment, many schools have inadequate, crowded and poorly equipped libraries. Many school buildings have no space for school libraries. Limited data on college and university construction needs indicate that the \$300 million planned for library buildings for the period 1956-70 represents only about half the actual need.

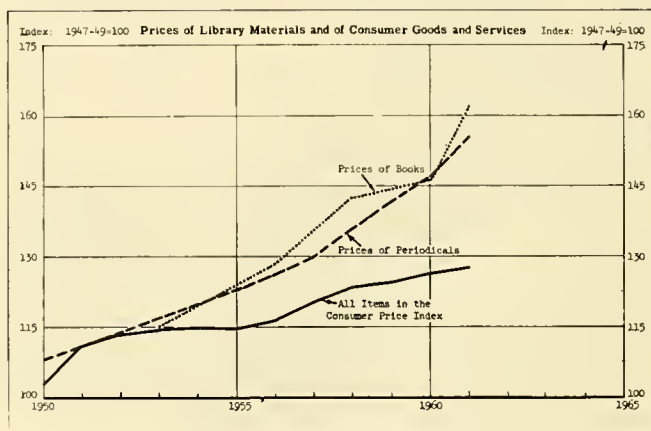
Library Materials

The collection, organization, and maintenance of library materials are activities common to all types of libraries. The increasing number of book titles appearing each year is indicative of the "information explosion" and of the expanding universe of books to be considered for purchase by librarians. As many book titles were produced worldwide during the first 60 years of this century as were produced between the years 1450 and 1900. Within the United States the number of titles published rose from 10,027 in 1930 to 18,060 in 1961.

The cost of books and other printed materials remains one of the principal expenditures of U. S. libraries. In 1960 libraries spent an estimated \$125 million for books, periodicals, and other library materials.

Prices of library materials are rising more rapidly than consumer prices generally. The cost of the average U. S. book rose 62 percent from \$3.59 to \$5.81 between the 1947-49 base period and 1961. The average periodical subscription rose 56 percent from \$3.62 to \$5.63 whereas consumer prices rose only 28 percent.

While there are factors common to all types of libraries, there are characteristics and problems which are unique to specific types of libraries--public, school, college and university, and special libraries.



Public Libraries

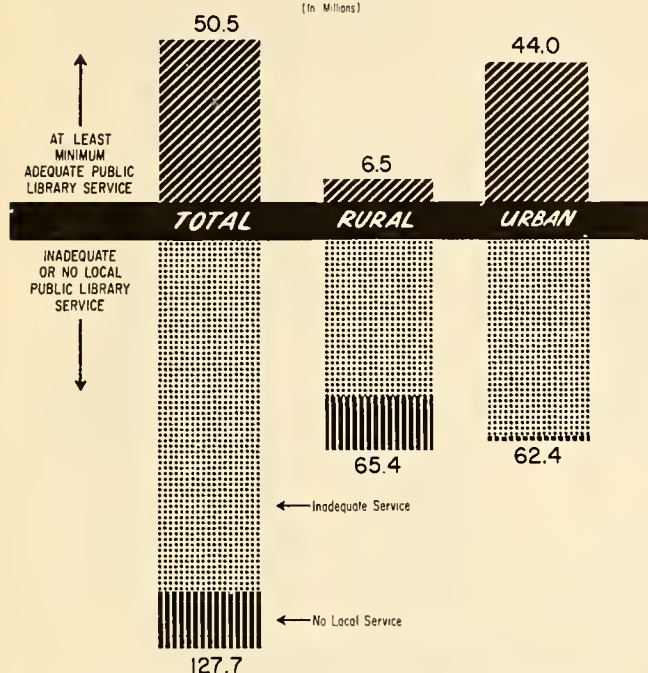
The Nation's public libraries made a marked advance in 1961 in public resources devoted to their operation and in services provided. Yet neither the increased resources nor the increased public usage has resulted in a significant approach to standards of minimum adequacy set by the American Library Association.

ADEQUACY OF PUBLIC LIBRARY SERVICE IN THE UNITED STATES

June 30, 1961

POPULATION

(In Millions)



Source: Preliminary data reported by the State Library Agencies based on their criteria for adequacy of service. The majority of these agencies followed American Library Association standards. "Rural"--area with less than 10,000 population; "Urban"--area with 10,000 population or more as defined in the Library Services Act regulations.

Nationally, according to preliminary reports submitted by the State library agencies and based on their standards, 18 million persons in 1961 had no legal access to public library service and 110 million persons had only inadequate service available to them. Only 50.5 million persons had minimum adequate library service.

Of the 8,190 public library systems in the Nation, there are 825 systems serving population groups of over 35,000 and accounting for 65 percent of the total population. Although many individual libraries may attain standards of minimum adequacy, the 825 major public libraries as a group only approach modest standards in respect to size of book collection, number of new volumes added, number of personnel available, and overall operating expenditures (exclusive of capital outlay).

These largest libraries in fiscal year 1960 added 10.5 million volumes to their holdings of 130.5 million volumes and circulated nearly 455 million volumes. Employing 35,500 staff members, of which one-third are professionals, they had operating expenditures in excess of \$194 million and capital outlays amounting to nearly \$35 million.

The resources of even these largest libraries indicate the availability of only 1.17 volumes per person. To provide minimum adequate service according to American Library Association standards, their library collections would have to be expanded by 19 percent, their staffs by 22 percent, and their operating expenditures, by 42 percent.

Public Libraries, 1960

Volumes (millions)	Professional librarians (thousands)	Expenditures (millions of dollars)				
		Total	Capital outlay	Salaries	Materials	Other
200	19.5	260 ^{1/}	36	160	46	18

^{1/} Estimated per capita expenditure for people with public library services was \$1.62.

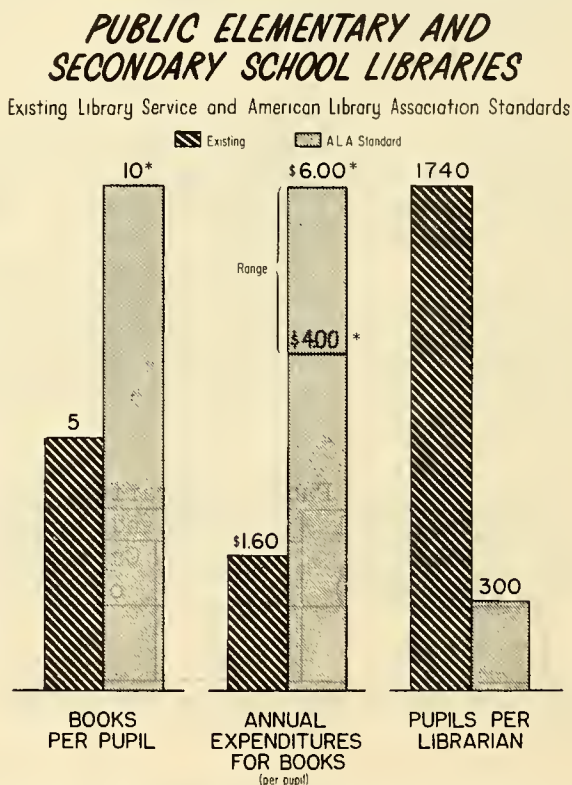
School Libraries

A good school library contains a varied collection of many materials chosen especially to serve the school's program of instruction and the needs of individual pupils. It can yield immeasurable returns in expanding intellectual horizons and achievements. To be more than a storehouse and to function effectively, a school library must be an inherent part of each school rather than a branch of a public library and it must be directed by trained librarians.

A 1958-59 Office of Education survey of public school libraries in school districts with enrollments of 150 and over showed that more than 10 million pupils were attending schools without centralized libraries. The lack of libraries was particularly serious in elementary schools.

Type of school	Schools (in thousands)			Pupils (in thousands)		
	Number	With centralized libraries		Number	With centralized libraries	
		Number	Percent of total		Number	Percent of total
All	82.2	41.5	50	33,716	23,046	68
Elementary	59.5	20.3	34	19,655	9,620	49
Secondary	13.6	13.1	97	9,512	9,366	98
Combined, Elem. & Sec.	9.2	8.1	88	4,550	4,060	89

Even though schools may have centralized libraries, they do not necessarily have the trained librarians or the materials to provide adequate services. At the time of the 1958-59 survey, there were 19,400 school librarians who had completed at least 15 semester hours of library science. The ratio of qualified librarians to pupils was one librarian to 1,740 pupils whereas the national standard, established by the American Library Association, is one librarian to 300 pupils. The 5.3 library books per pupil and \$1.60 annual expenditure per pupil in 1958-59 for books were also below the American Library Association national standards of 10 books and \$4 to \$6 annual expenditure per pupil.



Source: The Library Services Branch survey covered about 15,500 school districts (36 percent of all public school districts) and 29.5 million pupils (97 percent of all pupils in public schools in the U.S. in the school year 1956-57). *In schools with centralized libraries.

College and University Libraries

With the move toward more student initiative in learning and less lecturing in the classroom, greater reliance is being placed on library resources. National totals of college and university library collections are impressive, aggregating 190 million volumes in 1960-61--up 13 million volumes from the previous year. Academic libraries employed 9,700 librarians and an equal number of sub-professional and clerical employees to serve students and faculty in nearly 2,000 institutions of higher education. They spent \$159 million--four percent of the total expenditure for educational and general purposes in their institutions.

College and University Libraries, 1960-61

Library materials (in millions)			Employees (in thousands)		Expenditures (millions of dollars)			
Volumes		Periodicals received during year (Titles)	Professional	Other	Total operating	Salaries and wages	Books and periodicals and binding	Other
Added during year	At end of year							
13	190	1.4	9.7	9.7	159	98	48	13

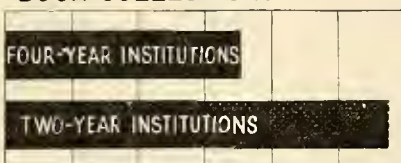
PUBLIC AND PRIVATE COLLEGE AND UNIVERSITY LIBRARIES

Existing Library Service and American Library Association Standards

BOOK COLLECTIONS

52% have less than
50,000 volumes

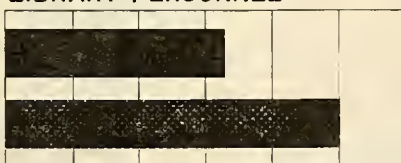
86% have less than
20,000 volumes



LIBRARY PERSONNEL

49% have less than
three professional
librarians

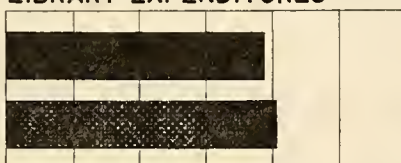
75% have less than
two professional
librarians



LIBRARY EXPENDITURES

58% receive less than
5 percent of total
institutional expenditure

62% receive less than
5 percent of total
institutional expenditure



Source: These percentages are based on 1960-61 data reported by 1,666 colleges and universities.

Some of our large universities have the most outstanding libraries in the Nation. Nine of the largest institutions had collections totaling nearly 30 million volumes and staffs totaling 1,000 librarians. Yet 1,200 academic libraries failed to meet the minimum requirements for adequate collections, and more than half of them failed to measure up to minimal staff requirements.

Of all libraries in four-year institutions, 52 percent are sub-standard with respect to collections (less than 50,000 volumes), 49 percent are sub-standard with respect to librarians (less than three professionals), and 58 percent are sub-standard in receiving less than five percent of total institutional expenditures. Libraries in two-year institutions are even worse off, according to American Library Association standards.

Despite present outlays, most academic libraries have difficulty in furnishing the library materials and professional staff services needed to make the best contributions to instructional and research programs. Furthermore, many institutions, newly-founded or expanding their curriculums and enrollments need to assign higher than average budgets to their libraries. Library resources that are inadequate today will become less adequate when measured against anticipated enrollments and the necessity for increased research.

Special Libraries

A "special library" serves a business or industrial firm, a bank, a governmental agency, a newspaper, magazine, or advertising agency, or any other organization whose activity creates a need for library service within a particular field or discipline. Highly specialized departments in public and in college or university libraries are occasionally considered as special libraries.

It is estimated that there are 10,000 persons employed in 7,500 special libraries in the following types of organizations:

Associations, societies	3,000
Companies	2,800
Government agencies	1,750
Total	7,550

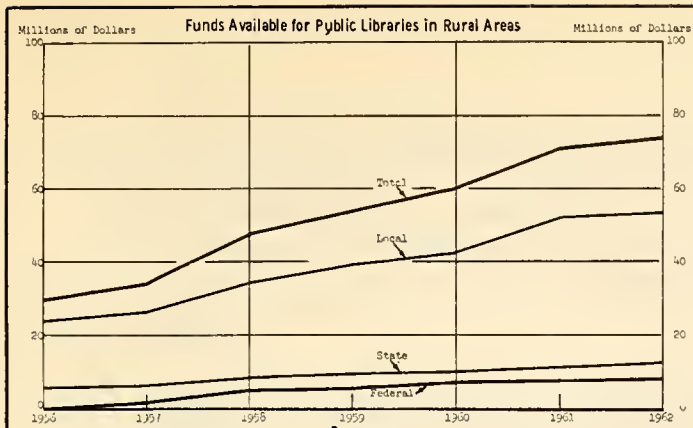
Inclusion of the special library departments of some 250 public and 2,200 college and university libraries would increase the total to 10,000 special libraries with some 15,000 employees. In addition, a Federal survey reveals that an estimated 850 persons are employed in approximately 90 technical information centers.

Library Services Act

The collection and publication by the Federal government of statistics relating to public libraries dates back to the 1860's and the inception of the U.S. Office of Education. The Federal legislative role in stimulating State and local action in the library field was recognized in 1956 with the passage of the Library Services Act (P.L. 84-597). Extended by P.L. 86-679 until June 30, 1966, the Act authorizes \$7.5 million annually for grants to the States for the extension of public library services to rural areas (places of under 10,000 population).

Under the stimulus of the Library Services Act:

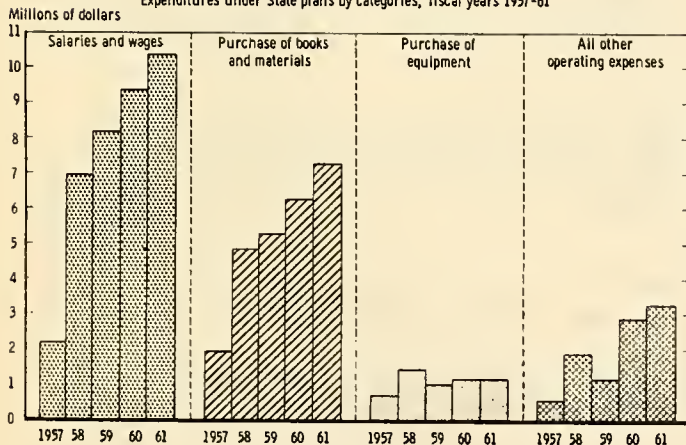
- 36 million rural residents have new or improved services.
- More than 8 million books and other informational materials have been added, and over 300 bookmobiles have been purchased.
- The States have greatly expanded their library extension services and have added 115 field consultants to assist local libraries.
- State appropriations for rural public library services increased by \$6 million, or 92 percent, and local appropriations increased by \$22 million, or 71 percent, between 1956 and 1962. State appropriations for all public library services doubled from \$12.3 million to \$25 million.



The many positive achievements of the program should not overshadow the magnitude of the job yet to be done. Preliminary data for 1961 indicate that 16.6 million rural residents had no legal access to local public library service and that an additional 49 million rural people had only inadequate service. Moreover, urban libraries in communities of over 10,000 population are ineligible for benefits under the Act and have little financial incentive to participate in cooperative programs for extending service to adjacent areas.

The Library Services Act

Expenditures under State plans by categories, fiscal years 1957-61



Expenditures under State Plans for Library Services^{1/}
(Fiscal year data in thousands of dollars)

	1957	1958	1959	1960	1961
Total	5,679	15,290	16,783	19,757	22,266
Level of government	Source of funds				
Federal	1,305	4,430	5,218	6,646	6,998
State	3,124	7,684	8,199	8,821	10,114
Local	1,250	3,177	3,366	4,290	5,154
Category	Usage of funds				
Salaries and wages	2,241	7,054	8,171	9,390	10,439
Purchases					
Books and materials	2,045	4,924	5,312	6,254	7,335
Equipment	739	1,455	1,074	1,211	1,171
All other operating expenses	654	1,857	2,226	2,903	3,322

^{1/} Provisional data from reports filed with the U. S. Office of Education by participating States and outlying parts under the Library Services Act. Data may not add to totals due to rounding.

DEVELOPMENTS UNDER THE NATIONAL DEFENSE EDUCATION ACT

The National Defense Education Act of 1958 authorizes over \$1 billion in Federal aid to education for programs that touch every level of education, public and private, from elementary through graduate school. The programs provided under the Act are designed to identify and educate more of the talent of the Nation, to improve the ways and means of teaching, and to further knowledge itself.

Programs Under the Act

The Act, as amended, authorizes the following Federal programs during the fiscal years 1959-1964 to encourage and assist in the expansion and improvement of certain aspects of education to meet critical national needs:

- Federal participation in college and university student loan funds (Title II).
- Grants to States and loans to nonprofit private schools for purchase of equipment and improvement of State supervision to strengthen elementary and secondary school instruction in science, mathematics, and modern foreign languages (Title III).
- Fellowships for graduate study (Title IV).
- Grants to States and contractual arrangements with institutions of higher learning to strengthen guidance, counseling, and testing in secondary schools, and to establish institutes for secondary school guidance and counseling personnel (Title V).
- Modern foreign language institutes for elementary and secondary school language teachers, and language and area study centers for work in rarely taught modern languages, and for the conduct of research (Title VI).
- Research and experimentation in more effective use of modern communications media for educational purposes (Title VII).
- Grants to States for development of area vocational education programs in scientific or technical fields (Title VIII).
- Grants to States to improve statistical services of State educational agencies (Title X).

As of mid-1962, nearly \$600 million had been obligated under the National Defense Education Act. Highlights of developments under the various programs authorized by the Act are described below.

Health, Education, and Welfare Indicators, September 1962

Student Loans (Title II)

Approximately 350,000 undergraduate and graduate students in 1,450 colleges and universities have borrowed \$225 million under the student loan program to continue their education. The Office of Education furnished \$202 million of this total.

By June 30, 1962, about \$5 million were repaid by students who have completed their college work. About one-fourth of the borrowers now paying off their student loans have become elementary or secondary school teachers.

Science, Mathematics, and Modern Languages (Title III)

The Office of Education and State educational agencies, on a 50-50 matching basis, have earmarked approximately \$300 million for new laboratory and other equipment and minor remodeling of classrooms to improve the teaching of science, mathematics, and modern foreign languages in the Nation's public elementary and secondary schools. In addition, loans totaling \$2.7 million have been made to approximately 180 private elementary and secondary schools for this purpose.

More than 15,000 public classrooms have been remodeled under this program, and more than 4,000 new electronic language laboratories have been constructed. Well over half of the projects have been in small schools with less than 1,000 students, and more than 90 percent of all local school districts have received funds for equipment to teach science. Some States report a doubling in enrollments in language classes in both elementary and high schools, and increases in science and mathematics enrollments are general throughout the Nation.

More than half of the money lent to private schools has been used to teach science or modern languages for the first time in their history. As a further boost, an additional \$7.9 million in Federal funds enable State educational agencies to increase their specialists in science, mathematics, and modern foreign languages from 33 in 1958 to well over 200 by 1962.

Graduate Fellowships (Title IV)

Grants have been made to 5,500 students under the graduate fellowship program, designed to train college teachers to help meet the current shortage. Thus far, \$58.6 million has been obligated for this program--half of which has been paid to the fellows and half to the 165 participating graduate schools to help establish or expand the graduate programs in which the fellows are studying.

Guidance, Counseling, and Testing (Title V)

The Office of Education has made \$47.8 million available to secondary schools for guidance, counseling, and testing programs, and schools are now employing the equivalent of 21,800 full-time guidance personnel, as compared with only 12,000 before the passage of the Act. More than 11,000 men and women have attended special institutes to train for professional careers in counseling and guidance, or to improve their skills in these fields, at an estimated cost of \$22.4 million.

As a result of these activities, 17 million high school students have been given the opportunity to take scholastic ability and achievement tests under special counseling and guidance programs.

Language Development (Title VI)

More than 11,000 elementary and high school language teachers have gone to summer school at 218 recently established language institutes to learn new teaching methods and the use of new teaching materials. To date, more than \$18.5 million has been obligated for improving language teachers' skills in this way.

As another important phase of the language development program under the Act, 53 language and area centers have been developed in colleges and universities for full-time study not only of languages but of the countries in which the languages are spoken. Enrollment in the 1960-61 academic year reached nearly 7,000. Approximately \$6 million has been obligated for this program.

The modern languages taught in the centers are of major importance to government, business, industry, and education in this country. Spoken collectively by about 1 billion people, they include Arabic, Chinese, Hindi-Urdu, Japanese, Portuguese, Russian, and Spanish, as well as other neglected languages. The study of the countries involved include such courses as economics, history, and literature.

In addition, more than 1,600 graduate students have been awarded fellowships for the study of 62 languages, a large percentage of them for study of languages of critical importance to our national purposes. Sixty colleges and universities offer courses for these students, and to date, \$8.8 million has been obligated.

As a first-time research effort, \$10.4 million has been obligated for 206 projects to determine the greatest needs in foreign language instruction, to determine the best methods of foreign language teaching, and to develop instructional materials such as grammars, readers, and dictionaries.

The end product of the training course is the highly skilled technician whose knowledge is of sufficient range to permit him to shift with technological change. One example of the departure from traditional occupational training is the new classification of welder-metallurgist, a dual skill necessary to the welding trade because of the new alloys used in rocket and atomic submarine development.

Thus far, \$32.4 million has been made available to the States under this program. Matching on a 50-50 basis is required, but in the first 3 years the States overmatched by about one-third.

Communications Media (Title VII)

Nearly \$10 million has been obligated to support 169 research projects to determine the most effective way of using television, radio, motion pictures, teaching machines, tape recordings, and similar communications media for educational purposes. Research grants are made upon recommendation of the National Advisory Committee on New Educational Media. Nearly 60 have been completed.

Over \$4 million has been obligated for getting into the schools information developed by research. Altogether, 113 contracts for this work have been awarded.

Technical Training (Title VIII)

Under the technical training program, both youths and adults are trained as highly skilled technicians in fields necessary for the national defense. Adults are generally workers who seek training for higher-level jobs or who are brushing up on latest developments in their fields.

Attendance at extension classes for adult workers reached 83,000 in 1961. More than 7,500 youths have already been trained as highly skilled technicians and graduated from the senior high school and post-secondary programs. More than 7,500 completed their training by the end of June.

Total enrollments this year are expected to exceed 150,000 in the technical training programs, an increase of 150 percent over the first year of the program. Five thousand women enrolled in area technical training programs, chiefly in the fields of data processing and computer programming, electronics and mechanics.

Placements of most graduates are in defense-related employment. Jobs were readily found for the graduates--in some States, there were not enough to fill the positions available. In one area, 600 students in data-processing techniques accepted jobs before their graduation. Pay for high school graduates who completed the additional 2-year courses in technical instruction, in the first 28 States reporting, was as high as \$7,200 and averaged \$4,600. Pay for graduates of the high school programs averaged \$3,900.

SCHOOL ASSISTANCE IN FEDERALLY AFFECTED AREAS

A total of \$2.5 billion has been appropriated over the 12-year period ending June 30, 1962 for the program of financial assistance to local educational agencies in Federally affected areas for current operating expenses and for construction of school facilities. This program of aid to "Federally impacted areas" was authorized under legislation (Public Laws 874 and 815) enacted in 1950.

The primary objective of P. L. 874 is to provide financial assistance for the maintenance and operation of schools in those local educational agencies upon which the U. S. Government has placed financial burdens by reason of the fact that: (1) local revenues to school districts affected have been reduced as the result of the acquisition of real property by the Federal government, or (2) such agencies provide education for children residing on Federal property or for those whose parents are employed on Federal property, or (3) there has been a sudden and substantial increase in the number of pupils in average daily attendance as a direct result of activities of the Federal government.

In addition to grants to local educational agencies, the law provides that the Commissioner of Education shall make arrangements to provide free public education for children who reside on Federal property if no local educational agency is able to provide suitable free public education for such children. These arrangements are made either with a local educational agency or with the head of a Federal department or agency administering the Federal property on which the children reside.

Public Law 815 provides Federal financial assistance for construction by local educational agencies of urgently needed minimum school facilities in school districts which have had substantial increases in school enrollment as a result of new or increased Federal activities or where many pupils reside on tax-exempt Federal properties, principally Indian reservations. In addition, assistance is provided for the construction of minimum school facilities by the Federal Government on Federal property (such as Army, Navy, and Air Force installations) where under State law no State or local educational agency can provide these children with suitable free public education.

Payments may be made to local educational agencies where evidence indicates that there has been, or will be, an increase in school enrollment of children residing on Federal property with parents employed on Federal property, and for children who either reside on Federal property or reside with a parent employed on Federal property, or where the increase in school enrollment has resulted or will result directly from activities of the United States, carried on directly or through a contractor.

Source: U. S. Department of Health, Education, and Welfare; Office of Education, Administration of Public Laws 874 and 815: Twelfth Annual Report..., June 30, 1962 (OE-22003-62).

Health, Education, and Welfare Indicators, March 1963

Numerous amendments made to Public Laws 874 and 815 since their original enactment in 1950 have liberalized the provisions of the laws in several respects, principally by increasing the rate of payment through the establishment of certain minimum rates and by extending coverage to additional categories of Federally-connected pupils. P. L. 85-620, enacted in 1958, made permanent those provisions of the Acts authorizing payments for children who live on Federal property with a parent employed on Federal property. Legislation enacted in 1961 extended the temporary provisions of both P. L. 874 and P. L. 815 through fiscal year 1963.

PROGRAM HIGHLIGHTS

Maintenance and Operation (Public Law 874)

- A total of \$1.4 billion was appropriated for this program from its beginning in 1950 through fiscal year 1962. For the twelfth consecutive year the number of school districts and the total amount of their entitlements increased--\$247 million was appropriated for FY 1962, as compared with \$217.3 million for FY 1961.
- The number of eligible school districts increased from 3,965 in FY 1961 to 4,065 in FY 1962. Increases were chiefly attributable to growth in school population and new or expanded Federal activities.
- The total number of pupils in the 4,065 eligible districts in 1962 approximated 11 million, or about one-third of all pupils attending public elementary and secondary schools in the Nation. Federally connected pupils totaled more than 1.75 million, representing 15.2 percent of the total attendance in eligible districts.
- Over 255 million acres in Federally owned property were claimed as a basis for entitlement in FY 1962. The number of different Federal properties claimed as a basis for payment totaled 5,288, an increase of 106 over 1961.
- Local educational agencies were entitled to approximately \$233 million in 1962, an amount equivalent to about 5.2 percent of current operating costs of eligible districts. Over \$230 million of these payments was to meet educational costs for pupils who resided on Federal property or resided with a parent employed on Federal property. The remainder was to meet additional costs incurred by school districts that experienced sudden increases in enrollment due directly to activities of the U. S. Government or loss of tax revenue because of Federal acquisition of real property. Payments of over \$13 million were made to Federal agencies or local educational agencies to provide public education to children residing on 48 Federal installations, chiefly military bases, where no local educational agency was able to provide suitable free public education.

Construction (Public Law 815)

- A total of \$1.1 billion was appropriated from the beginning of the program in 1950 through fiscal year 1962.
- Federal funds amounting to \$947 million have been reserved for 4,961 construction projects submitted by approximately 1,840 different local school districts. Of these projects, 1,326 are new elementary schools and 1,963 are additions to elementary schools, 461 are new secondary schools and 846 are additions to secondary schools, and 365 are for improvements to existing facilities such as equipment and heating plants. Of these projects, 4,469 are completed, 407 are under construction, and 85 are in the preconstruction stage.
- To the Federal funds, school districts have added an estimated \$670 million (exclusive of site, off-site improvements, and other costs) for a total of over \$1.6 billion used to construct 53,345 classrooms and related facilities for 1,547,000 pupils.
- Of the total granted to local school districts, almost \$42 million has been allocated under section 14 (formerly Title IV) to 250 projects to provide 1,428 public school classrooms for 40,900 pupils (primarily children living on Indian reservations), and funds for 40 projects costing over \$7.5 million have been reserved for construction of temporary school facilities housing 13,900 pupils.
- In addition to the funds granted to local school districts, approximately \$123 million has been allocated for Federal construction of 310 projects on Federal property, comprised of 3,241 classrooms and related facilities for 98,400 pupils living on Federal property.

PART III

CURRENT AND EMERGING ISSUES AND OPPORTUNITIES

**Welfare
and Income
Maintenance**

THE OLDER POPULATION*

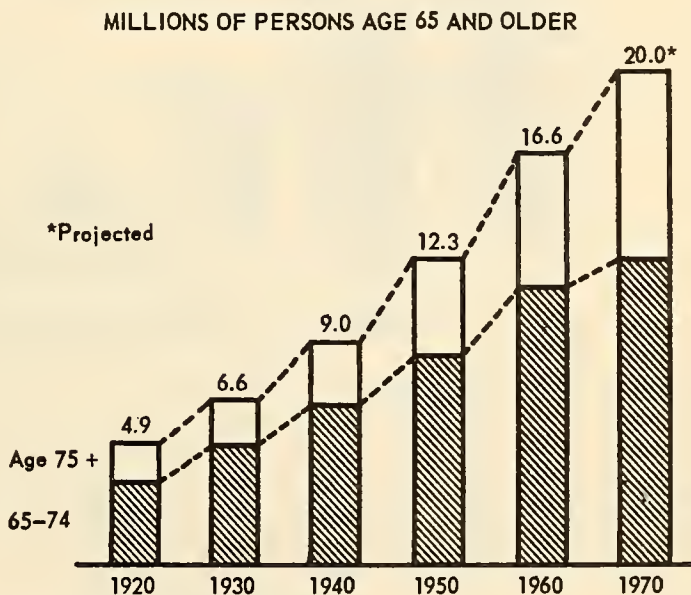
Eugenia Sullivan

As the number of aged people in the community grows, the problems of the older population become magnified. These problems center around inadequate incomes, declining health and physical capacity, increased need for health and medical services but decreased ability to pay for them, and inadequate or unsuitable housing.

Number and Characteristics of the Aged

One out of 11 persons in the United States is aged 65 or over, and the number of aged persons is growing at the rate of over 1,000 a day. The aged population is increasing both numerically and as a proportion of the total population. Since the beginning of the century the number of persons aged 65 and over has increased more than five-fold--from 3.1 million in 1900 to 17.5 million in 1963. This rate of growth has been far greater than that of the population as a whole and has changed the age distribution of the population. Older people were 4 percent of the population in 1900; today they make up 9.3 percent.

The proportion of older people is expected to increase only slightly during the 1960-70 decade. Nevertheless, by 1970 there will be 20 million persons aged 65 and over and, on the average, they will be older than the present aged group. The highest proportionate increases in the aged population are in the oldest age brackets--75 and over.



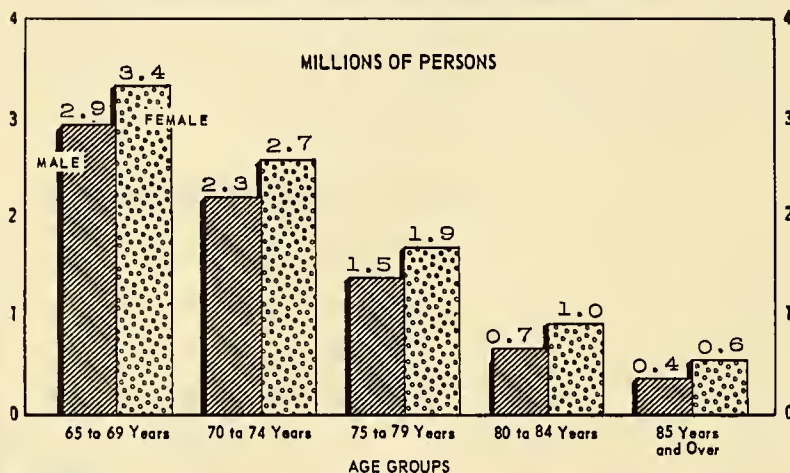
Miss Sullivan is a Staff Assistant in the Office of Program Analysis, Office of the Assistant Secretary (for Legislation), U. S. Department of Health, Education, and Welfare. Based on data provided by: (1) Social Security Administration, Division of Program Research, The Health Care of the Aged, 1962; (2) Public Health Service, U. S. National Health Survey, Older Persons Selected Health Characteristics (PHS Pub. No. 584-C4, 1960); (3) U. S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-60, No. 37, Income of Families and Persons in the United States: 1960; (4) Housing and Home Finance Agency, Senior Citizens and How They Live, Part I, The National Scene, July 1962.

*The older population here is limited to persons 65 and over except that for the special tabulations on housing from the 1960 census the definition is broadened to include persons 60 and over.

Increased longevity has brought about the dramatic increase in the aged population. The average life expectancy at birth has risen from 49.2 years in 1900 to an estimated 70.2 years in 1961. Life Expectancy (1961) is greater for women than for men (73.6 and 67.0 years) and greater for whites than for nonwhites (71.0 and 64.4 years).

Women outnumber men in the over-65 age group; there are 124 women per 100 men aged 65 and over. Moreover, because women tend to live longer than men, the excess of women over men increases in the upper age brackets. In the group over 85 there are 158 women for every 100 men. Women's greater longevity coupled with the fact that they marry younger than men contributes to the preponderance of widows at the upper age levels.

U.S. Population 65 Years and Over, by Sex, 1961



Source: Bureau of the Census, Current Population Reports, Series P-25.

Health Conditions of the Aged

Health problems are a major concern of the aged population, since advancing age is accompanied by a decline in health and physical capacity. As a group, older people are more prone to chronic illness and as a result more likely to be partially or completely limited in activity than younger people.

Illness and Disability Among Older People

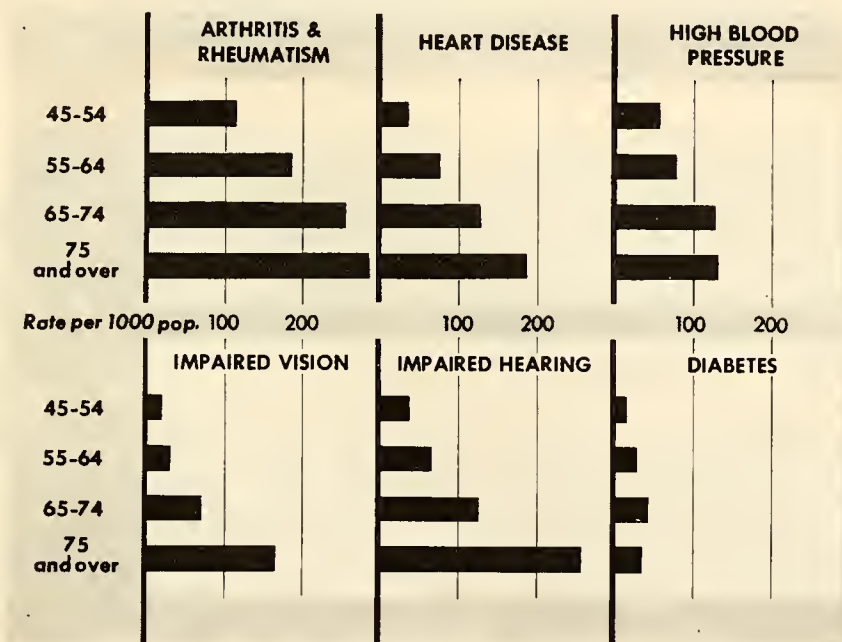
Older persons are twice as likely as those under 65 to have one or more chronic conditions. Data from the National Health Survey show that about four out of five persons aged 65 and over have one or more chronic conditions, as contrasted with two out of five younger persons. While some of these conditions are relatively minor afflictions, such as sinusitis, hay fever, or bronchitis, many more are serious conditions such as high blood pressure, heart disease, or diabetes. The incidence of chronic illnesses increases with age; the number of persons with one or more chronic conditions increases from 74 out of 100 persons in the age group 65-74 to 84 out of every 100 persons aged 75 and over.

Similarly, the extent of disability due to chronic illness increases with age. Well over half of the aged persons with one or more chronic conditions have some limitation of activity, whereas among younger persons with chronic illness, only one out of five has any limitation of activity. Among persons aged 75 and over who have one or more chronic conditions, partial or major limitation of activity occurs in about 2 out of 3 cases.

Days of restricted activity and bed-disability days are another measure of the impact of chronic illness on the aged population. The National Health Survey showed that in 1960 people aged 65 and over were restricted in their usual activities an average of 38 days per year--more than $2\frac{1}{2}$ times as many days as younger persons. On 14 of these days, the aged person was confined to bed all or most of the time.

The chief chronic illnesses of old-age are arthritis, rheumatism, heart disease and high blood pressure. Among the population aged 65 and over during the period July 1957-June 1959, 149 per 1,000 persons had a heart condition, 129 per 1,000 had high blood pressure, and 266 per 1,000 had arthritis or rheumatism.

Most Common Causes of Illness and Impairment Among Older People



Many aged persons suffer from visual or hearing impairments. The National Health Survey reports that one out of 10 aged persons has impaired sight and one out of every six suffers from partial or complete deafness. Visual and hearing impairment rise sharply among persons over age 75. In this age group, one out of six has impaired sight and one out of four impaired hearing.

Although chronic illness is the major health problem of the aged, the incidence of acute illnesses among older persons, particularly respiratory conditions, is by no means insignificant. In many cases, acute illnesses may be the immediate cause of death for older persons with chronic conditions. A total of 134 acute conditions for every 100 aged persons was reported in 1959. Accidents, too, cause a considerable amount of disability among older persons. About one out of every four aged persons was injured in 1959, about two-thirds of them in accidents occurring in the home.

The National Health Survey data on health conditions of the aged are based on household interviews and exclude persons in nursing homes, homes for the aged, and long-stay hospitals, as well as persons whose illness resulted in death during the survey year. For these reasons, the data present a more favorable picture of the health situation of older persons than is actually the case.

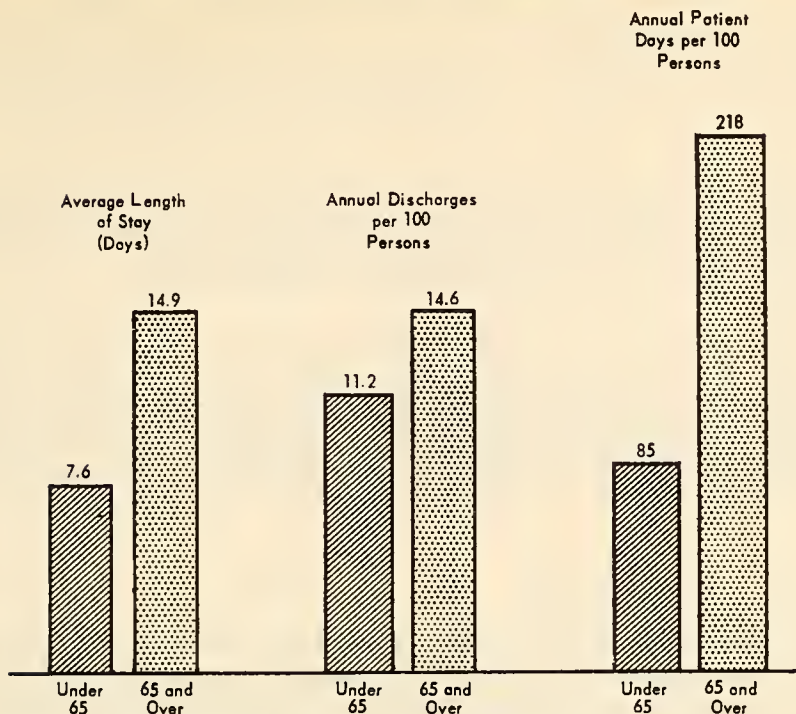
Utilization of Medical Services

As might be expected from the state of their health, older people utilize health facilities and medical services more than younger persons. They use a greater volume of physicians' services and are admitted to hospitals more often and stay longer. They are the primary users of nursing home and other long-term care facilities and receive a greater amount of home care, part of which is provided by nurses. They need and use more drugs.

In 1959 persons aged 65 and over averaged 6.8 physician visits per year--two more than younger persons. The rate of physician visits was higher for women than for men and increased with the size of family income. Aged persons with limitation of activity due to chronic illness consult a physician more often than those without such conditions, and the number of physician visits increases with the severity of the condition. However, among persons with equally severe limitations, persons with higher incomes visit a doctor more often than those with lower incomes.

Hospital utilization may be measured by several indexes, including hospital admissions or discharges, length of stay, days of care, and the number of persons hospitalized. Data from the National Health Survey for the two-year period ending June 1960 show that discharges from short-stay hospitals averaged 14.6 per 100 persons aged 65 and over as compared to 11.2 discharges per 100 persons under age 65. Aged persons spent, on the average, about $2\frac{1}{2}$ times as many days in the hospital as persons under age 65--218 days as compared to 85 days per 100 persons. Their average length of stay was about twice as long--14.9 days as compared to 7.6 days for younger persons. Aged men remain in hospitals an average of 15.9 days as compared to 14 days for women.

UTILIZATION RATES IN SHORT-TERM GENERAL HOSPITALS*



*Based on household interviews of persons living at the time of interview.
SOURCE: Public Health Service, U.S. National Health Survey, 1958-60

Since the Health Survey data exclude persons who died in the hospital or subsequently during the year before the interview, there is some understatement of hospital utilization. A survey based on hospital records indicates that the inclusion of hospitalization received by persons who died during the survey year would result in increases of one-fourth to one-third in the total volume of hospitalization for persons 65 and over.

Insurance Coverage and Hospital Utilization

Just over half of the aged population have some health insurance coverage, in most cases hospitalization insurance. The National Health Survey found a considerable difference in the rate of hospital utilization among insured and non-insured persons. The difference among insured and non-insured persons was greater in the group aged 65 and over than in any other age group. About 13.7 percent of aged persons with hospitalization insurance were hospitalized in 1959 as compared with 8.2 percent of those without insurance.

Fewer aged persons than younger persons have any part of their hospital bill paid by insurance, and, for those who are insured, the insurance pays a smaller proportion of the hospital bill than for younger persons with hospital insurance. Data from the National Health Survey for 1958-60 showed that of the total aged patients discharged from short-stay hospitals, 49 percent had no part of the hospital bill paid by insurance, 9 percent had less than half of the bill paid, and only 30 percent had three-fourths or more paid. Comparable data for younger persons showed only 30 percent with no part of the hospital bill paid by insurance and 54 percent with three-fourths or more paid.

The actual percentage of aged persons who had insurance coverage for hospital bills and the proportion of the bill covered are probably smaller than the data indicate because persons who died during the year are not included in the survey. Insurance coverage in the older age groups, where the death rate is highest, drops sharply; in 1959 only 32.5 percent of persons aged 75 and over had any hospitalization insurance.

Mental Illness Among Older People

Mental illness is a serious health problem among older people. About one out of four first admissions to public hospitals for the mentally ill is a patient aged 65 or over. In 1960 the first admission rate for the aged was more than 3 times that of the population under 65. Some 82 percent of the persons admitted at age 65 and over were diagnosed as having senile or arteriosclerotic brain damage.

Resident patients aged 65 and over in State and local mental hospitals numbered 138,600 in 1960--about 30 percent of the resident patient population. About half of the aged patients in mental hospitals are persons who were admitted at age 65 and over.

However, statistics on the aged in mental hospitals reflect only a part of the problem of mental health of older people. Many older persons with psychological dysfunction are to be found outside of mental hospitals--in nursing homes, in homes for the aged, and in the care of relatives or friends. Many of these persons require supervision in an institutional setting, but others, who have some behavior problems which require supervision, may not need 24-hour institutional care.

A survey of psychiatric services for the aged in metropolitan New York conducted in 1958-59 by the New York State Department of Mental Hygiene found that mental and physical disabilities of older people account only partially for their admission to mental hospitals, homes for the aged, and nursing homes. The lack of social, psychiatric, and other medical services in the community--particularly home-care services--is often the cause of such admissions. Of those admitted to homes for the aged, 57 percent were either persons with disabilities who were unable to care for themselves and had no relatives, friends, or others to care for them; or persons with physical, psychological, social, or financial problems beyond their capabilities without more help than the community now provides. Some 40 percent of those in State mental hospitals, but only 17 percent of those in nursing homes, had been admitted for these same reasons.

The study showed that some 90 percent of the inmates of homes for the aged and nursing homes, as well as State mental hospitals, have sufficiently disturbed behavior to be diagnosed as mentally ill. However, the proportion with severe mental impairments is greater in the State hospitals.

In short, the type of institution to which an aged person is confined is not necessarily an indication of his physical or mental condition, since there is considerable overlapping in the frequency of physical and mental disorders among inmates of all three types of long-term care facilities.

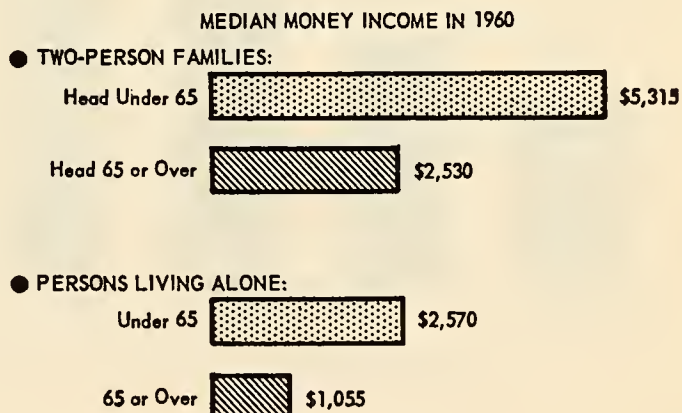
A report, "Mental Illness Among Older Americans," prepared in 1961 for the Senate Special Committee on Aging, points to the need for more community services designed to prevent mental hospitalization, improved services for the aged in mental hospitals, and more trained personnel in the mental health professions.

The Financial Position of the Aged

The decline in health and physical capacity of older people is accompanied by a decline in income. Annual incomes average substantially less for older persons than for people under age 65, reflecting the relatively large proportion of aged persons who have retired from the labor force and are dependent on types of income other than earnings.

The most comprehensive information on the income status of the aged comes from the Current Population Survey of the Bureau of the Census. These data show that in 1960 the average annual income of families headed by a person over 65 was \$2,900--about half that for families headed by persons under 65. About three-fourths of families with aged heads were two-person families--usually husband-wife families. The average annual income for aged couples was \$2,500, as compared with \$5,300 for younger two-person families. The proportion reporting annual incomes of less than \$2,000 was over twice as large--36 percent among older two-person-families as compared with 16 percent of the younger two-person families. Aged persons living alone or with nonrelatives generally had much lower incomes than aged couples; the average was \$1,053.

The most important factors affecting the income status of the aged in recent years have been the declining labor force participation of the aged and the increase in the numbers and proportion of the aged getting income from public income maintenance programs.



Sources of Income

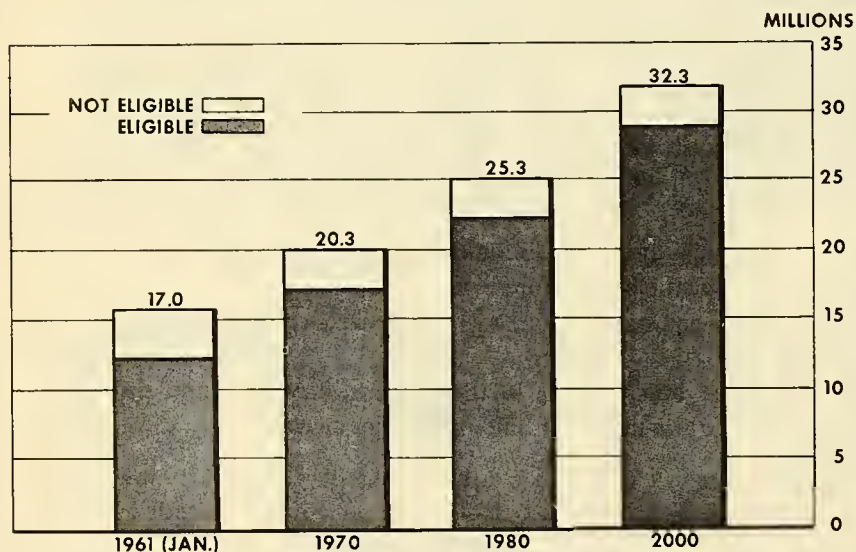
In 1960, earnings from work were the sole source of income for only 10 percent of families with heads 65 and over. One-third of the older families reported no earnings. Over one-half had both work and other income. Older families with no earnings from work had the lowest incomes--about one-half had less than \$2,000. Only one-fifth of the families with work income alone, or a combination of earnings and other income, had less than \$2,000. Other income includes old-age and survivors insurance benefits, public assistance, payments from private pension plans, veterans' payments, interest, dividends, annuities, and rents.

Among older persons living alone or with nonrelatives, a much smaller percentage--one-fourth--have earnings from work. Single aged persons who reported no earnings had about half as much incomes as those with earnings.

Few of the aged work full-time. The majority of older people who work have part-time jobs or are employed for only part of the year. One out of 6 aged men and only one out of 25 women who had reached age 65 reported they were year-round, full-time workers in 1960.

The Census study tends to underestimate total income because some types of income, such as realized capital gains and lump-sum insurance payments, are not counted. Also, people are more likely to understate unearned income than earned income. Even after allowance for these factors, a substantial proportion of older nonearner families had incomes totaling less than \$2,000 in 1960.

People 65 and Over Eligible for Social Security



About 71 percent of the total aged population now get retirement or survivors benefits under the old-age and survivors insurance program. Over 78 percent of the aged are eligible to receive such benefits. About 1½ million older people are not receiving benefits because they are working and earning substantial amounts or are the dependents of such workers.

It is estimated that 89 percent of those now reaching age 65 are eligible for old-age and survivors insurance. The difference in eligibility

rates between persons now reaching 65 and the total aged population is due to the numbers of the latter, particularly in the older age groups, who retired before their work was covered by the old-age and survivors insurance program or who are the dependents or survivors of such workers. In the future nearly 95 percent of all persons reaching age 65 will be eligible for old-age and survivors insurance.

Some 2.2 million aged persons are currently getting old-age assistance under the Federal-State public assistance program. About one-third of the old-age assistance recipients also get old-age and survivors insurance benefits, and about one out of two persons now coming on the old-age assistance rolls is also a social security beneficiary.

About one out of ten aged persons get benefits under the railroad retirement program or the Federal employees retirement system. In 1961, for the first time, more aged persons--one out of nine--got benefits under the veterans' pension and compensation programs than under the programs for railroad and government workers.

Payments under public income maintenance programs--the chief support of the aged population--are not large. In March 1963, the average monthly benefit to a retired worker under the OASDI program was \$76; the average widow's benefit was \$66. The average monthly old-age assistance payment was \$76.

Benefits tend to be larger under the programs for railroad and government workers. In March 1963, the average annuity of a retired railroad worker was \$135. Payments to aged widows under the railroad retirement program averaged \$72. Monthly payments to retired Federal employees averaged \$181 in 1962.

In mid-1962, an estimated 1-3/4 million aged Americans--about 1 out of 10 people aged 65 and over--were getting private retirement pensions. The majority of them were old-age and survivors insurance beneficiaries.

Pension plans have expanded rapidly since 1950, when pensions became a prime objective of collective bargaining. An estimated 23 million workers are now covered by such plans. But since much of the private pension coverage is of relatively recent origin, the full potential of private pension plans in providing retirement income lies largely in the years ahead.

Current information on the proportion of aged persons getting other forms of income from private sources is almost nonexistent. It is estimated that in 1961 more than 600,000 annuities, purchased individually or elected as settlement under life policies, were being paid to persons aged 65 and over. The number of persons who draw income from this source is smaller because some persons receive more than one annuity. Some aged persons have other forms of property income such as interest, dividends, or rent, or get cash contributions from relatives.

Assets of the Aged

Older persons are somewhat more likely than younger persons to have some savings, but in most cases these savings are not readily convertible to cash. The 1960 Survey of Consumer Finances, conducted by the University of Michigan Survey Research Center for the Federal Reserve Board, found that among spending units with heads aged 65 and over, 30 percent had no liquid assets, and 20 percent had liquid assets valued at less than \$1,000.

Equity in a home is by far the most common asset of the aged. Ownership of a home was reported by 64 percent of the older spending unit heads in the 1960 survey and more than four-fifths of the homes were clear of mortgage debt. More than half of the home owners reported the value of the home as less than \$10,000.

A 1957 survey of old-age and survivors insurance beneficiaries found that about two out of three of the married beneficiaries and one out of three nonmarried beneficiaries owned a nonfarm home. Most of these homes were mortgage-free, but the equity was relatively modest--about \$8,000 for married couples and widows and about \$6,000 for single retired workers. Expenses of home ownership for urban couples who owned their homes mortgage-free averaged about 30 percent less than the average outlay for rent and utilities by couples living in rented living quarters.

Budgetary Needs of the Aged

Some measure of the budgetary needs of older persons is needed in order to place in perspective the income data on the aged. The Bureau of Labor Statistics released data in 1960 on the budget costs for a retired couple representing a "modest but adequate level of living" for a couple in reasonably good health, living in rented quarters in an urban area.

The cost of a retired couple's budget has been estimated by the Bureau of Labor Statistics to have ranged from \$2,641 to \$3,366 in twenty large cities in the fall of 1959. It would appear that the average annual income (\$2,530 in 1960) of older two-persons families, the majority of whom are retired couples, is insufficient.

Tax Benefits for the Aged

Three special provisions of the Federal income tax laws benefit older people. These are the additional \$600 personal exemption for persons 65 and over, the retirement income credit (exempting up to \$1,200 of retirement income), and the special medical expense deduction over and above that available to younger persons. The Treasury Department estimated that during fiscal year 1962 taxpayers aged 65 and over saved about \$742 million in personal income taxes as a result of the provisions. Of this total, \$482 million represented tax savings from the double exemption, \$120 million was from the retirement income credit, and \$140 million resulted from the special medical expense deduction.

The greatest advantage from these tax provisions accrues, of course, to the minority of older people with high incomes. Tax benefits do not appreciably improve the financial position of older people who do not have substantial amounts of income apart from their social security benefits. The 1957 survey of old-age and survivors insurance beneficiaries found that well over half of the aged beneficiaries had less than \$600 in income other than benefits.

Families and Households

Just over half of all aged persons are married and living with a spouse. But nearly two-fifths are widowed, and the majority of them are women. Almost half of the aged widows are 75 and over.

About 7 out of 10 persons aged 65 and over live alone or in two-person households. The majority of the two-person households are husband-wife families, while 7 out of 10 one-persons households are comprised of women. Only a small proportion of the aged--less than 4 percent--are in institutions.

Marital Status and Living Arrangements: Distribution of persons 65 and over, by sex and age, for the United States, March 1961

Status	Total 65 and over	Male			Female		
		Total	65 to 74	75 and over	Total	65 to 74	75 and over
Total, 65 and over.....	100.0	44.8	29.8	15.0	55.2	35.0	20.2
Married, spouse present.....	50.9	31.2	23.0	8.3	19.7	15.5	4.1
Other, by marital status:							
Widowed.....	38.6	9.1	3.8	5.3	29.5	15.5	14.0
Separated.....	2.1	1.1	.8	.4	1.0	.8	.2
Divorced.....	1.5	.6	.4	.2	.9	.6	.3
Never married.....	6.8	7.7	1.8	.8	4.1	2.6	1.6
Other, by living arrangements:							
In families.....	23.1	6.0	2.6	3.3	17.2	8.8	8.4
Family head (spouse not present).....	8.2	2.0	1.2	.8	6.2	3.7	2.5
Relative of head (other than wife).....	14.9	4.0	1.4	2.5	11.0	5.1	5.9
Living alone or lodging.....	22.3	6.1	3.5	2.7	16.2	9.6	6.6
In institutions.....	3.7	1.6	.7	.7	2.2	1.1	1.1

Source: Bureau of the Census, *Current Population Reports: Population Characteristics*, Series P-20, No. 114. "Marital and Family Status: March 1961," January 31, 1962; and preliminary count of institutional inmates from the 1960 Census of Population.

The 1960 census contained data on living arrangements of "elderly" people, broadening the 1950 definition to include all persons 60 years of age and over living in households. As of 1960 there were 22.2 million such persons in the United States. About 70 percent were members of households owning their own homes, and the majority were heads of household and their wives.

About half of the persons 60 and over in 1960 who were living in households lived as two-person households, and about 4 out of 5 of these were husbands and wives living together. The remaining 50 percent of the elderly persons were divided equally among one-, three-, and four-or-more-person households. The extent to which older people have at least nominal

control over their living arrangements is indicated by the proportion who are household heads or wives of heads. Among both owner and renter units, the proportion is high--81 percent for owners and 84 percent for renters.

Income and Living Arrangements

Since income is a major factor influencing the living arrangements of senior citizens, the 1960 census analyzed both the individual income of elderly householders and the total household income of households containing elderly members. The analysis showed that the elderly head of a household had a much larger income than the oldest member who was 60 or over--\$1,900 on the average, as compared to \$800. The average for male heads (\$2,400) was much higher than for females (\$1,100).

Household income (the combined income of all related household members) is, of course, a clearer indication of ability to pay for housing under present living arrangements than individual incomes. In 1960 the median annual income for all households containing elderly members was \$3,300, well below the average for all households (\$5,000). Although it is likely that renter households need more income than owner households to cover housing expenses, incomes of renter households averaged only \$2,400, as compared to \$3,800 for owner households.

Type of Housing

About 9 out of 10 owner households live in single-family housing units, about 9 percent, in structures with two or more units, and 1 percent live in trailers. Among renter households, 42 percent live in single-family units, 24 percent in two to four family structures, and 33 percent in buildings with five or more units.

Whether older people are better off in single-family housing units or in more compact apartment units is debatable. Single-family housing offers the opportunity for pursuit of hobbies centering about the home and garden, while apartment living reduces burdens in upkeep and household chores.

Equity in a home enables homeowners, as a group, to have lower housing expenses than renters, despite the burden of taxes and repairs. Because the average cash value of homes owned by older people is not high, most of these homeowners would be unable to obtain comparable rental housing if they sold their homes and invested the equity. The 1960 census data show that some 53 percent of the nonfarm homes owned by persons aged 65 and over were valued at less than \$10,000. The median value of owner-occupied homes was \$9,900 for those in the age group 65-74 and \$8,600 in the group 75 and over. Persons with higher incomes had higher equity in their homes. Also, there was a higher rate of home ownership among persons with higher incomes.

The higher incomes of owner households as compared to renter households result from the fact that a greater proportion of owner households contain two or more persons. Among the 3.8 million single elderly persons who maintain their own households there is very little difference in income between owners and renters. For these one-person households median incomes for renters and owners were \$1,200 and \$1,100 respectively.

The generally low incomes of these single-person households indicate that many of them cannot afford decent housing. The homeowners, since they have some equity in their homes, are apt to be better off than renters and are likely to remain owners because they cannot afford suitable rental housing.

Quality of Housing

Older people are more likely than younger persons to have poor housing. In April 1960, over 19 percent of the 16 million housing units in which persons aged 60 and over lived were substandard in that they lacked private bath, toilet, or hot running water, or were structurally deficient. Only 15 percent of the households in which there were no senior citizens were substandard. Units occupied by households with heads under 60 years old were in better condition than those with heads 60 and over, probably because the younger household heads were still active in the labor force and so were likely to have larger incomes. Households headed by persons aged 65 and over are likely to have even poorer housing. Some 30 percent of such households had substandard housing in 1960.

The relationship between housing quality and income is indicated by the fact that the median income among owners with adequate housing was \$4,400; while the median for owners of substandard units was only \$1,500. Similarly, among renters, those with adequate housing had median incomes of \$3,300 as opposed to \$1,300 for those in substandard units.

Mobility

Households containing one or more older persons are less mobile than younger households. The census data showed that one-half of all households moved at least once in the period 1955-1959, as contrasted with 30 percent of households with one or more senior citizens and with 26 percent of households headed by persons aged 65 and over. Some 30 percent of households containing one or more persons aged 60 and over--and 36 percent of those headed by persons 65 and over--had lived in their present unit for more than 20 years. Homeowners are less mobile than renters. Some 38 percent of the owner households with older members had lived in the same place for more than 20 years, as compared with 15 percent of the renter units. Among households headed by persons aged 65 and over, the percentages were 45 for owner-occupied units and 16 for renters.

NEW HORIZONS FOR THE AGED

Wilbur J. Cohen and Donald P. Kent

The Federal Government is increasingly concerned with the well-being of older Americans. The majority of all Federal programs for elderly people are administered by the Department of Health, Education, and Welfare. For this reason, the Department has the responsibility to provide leadership in seeking constructive solutions to the problems of our older citizens.

To help older people, one of the most important jobs that the Department of Health, Education, and Welfare can do is to make available all possible information and guidance--to the States and private organizations that work directly with and for the elderly, and to the older person himself, to show him where to get the assistance he may need. Many Americans, and especially those of the older age groups who may no longer be continuously in touch with current developments, do not realize the extent of the services and assistance available to them. Nor are they aware of the scope of the projects and research that are being carried out to further their interests--work which is being done by universities, voluntary agencies, and State and local governments as well as by the Federal Government.

Important gains have been achieved during the past two years both in legislation and in services, research, and pilot projects on problems of particular concern to the elderly.

LEGISLATIVE GAINS, 1961-62

Federal legislation relating to the health and economic security of older Americans is developed, analyzed, and supported by the Department of Health, Education, and Welfare. Its staff members are the chief spokesmen in the Executive Branch of the Government for older citizens and testify to Congress in their behalf. In the past two years, the following important pieces of legislation of special interest to older citizens have been enacted:

1961 Amendments to Old-Age and Survivors Insurance

These amendments improved the flexibility and effectiveness of the social security program, in that they:

- Lowered the age at which men are first eligible for old-age and survivors insurance benefits from 65 to 62 (with benefits for those who claim them before age 65 reduced to take account of the longer period over which they will receive their payments). This change, which is similar to that previously established for women, has resulted in benefit awards to an estimated 740,000 persons.

Mr. Cohen is the Assistant Secretary for Legislation, and Dr. Kent is the Director, Office of Aging, in the new Welfare Administration, U.S. Department of Health, Education, and Welfare. This analysis reflects administrative changes affecting the aged that were made in the Public Health Service effective November 27, 1962 and in the Social Security Administration, the new Welfare Administration, and the Vocational Rehabilitation Administration (formerly the Office of Vocational Rehabilitation) effective January 28, 1963.

Health, Education, and Welfare Indicators, January 1963

Revised

- Raised the minimum benefit for a disabled worker or a worker retiring at or after age 65 from \$33 to \$40 per month. An additional \$140 million has been paid aged beneficiaries because of this change.
- Increased widows' and parents' benefits by 10 percent, to a new total of $82\frac{1}{2}$ percent of the primary insurance amount, resulting in an additional \$105 million in benefits to approximately 1.6 million aged beneficiaries.
- Lowered the work requirements for eligibility for social security benefits from one quarter of covered work for each three calendar quarters elapsing after 1950 to one in four, thus enabling benefits to be paid to approximately 100,000 retired persons who would not otherwise have qualified.
- Liberalized the retirement test so that beneficiaries have less of their social security payments withheld when their earnings exceed \$1200. As a result, beneficiaries have greater incentive to supplement retirement income with part-time or occasional earnings. It is estimated that an additional \$35 million in benefits has been paid to 350,000 beneficiaries as a result of the new retirement test.

1961 Amendments to Old-Age Assistance

- Increased, from \$12 to \$15, the average monthly maximum for Federal sharing in expenditures for medical care in behalf of recipients of old-age assistance.
- Increased, from \$65 to \$66, the average monthly maximum for Federal sharing in old-age assistance payments, with the Federal Government paying up to 80 percent of this increase.
- Raised the ceiling on Federal grants to Puerto Rico, Guam, and the Virgin Islands for public assistance, thus enabling those jurisdictions to provide more adequate payments and better medical care for old-age assistance recipients.

The Community Health Services and Facilities Act of 1961

This legislation makes possible a whole new approach to the care of the chronic conditions that now afflict four out of five older persons--an approach emphasizing rehabilitation, restoration, and self-care. The law provides for:

- An increase from \$10 million to \$20 million in the ceiling on annual Federal appropriations for public and non-profit nursing homes under the Hill-Burton program.
- A five-year program of grants-in-aid to States for establishing and expanding out-of-hospital services primarily for the chronically ill and aging.
- Project grants to public and non-profit agencies for studies, experiments and demonstrations designed to develop new or improved methods of providing out-of-hospital health services, especially for the chronically ill and aging.

As a result of this legislation, funds in the amount of \$6 million in fiscal year 1962 and \$13 million in FY 1963 were appropriated for grants to States on a formula basis of \$1 of Federal funds for 50¢ of State funds for development of community health services to the chronically ill and the aged. Improvement or expansion of services in nursing homes leads in activities supported by these grants.

For fiscal years 1962 and 1963, funds amounting to \$8.3 million were made available for special project grants. To date, 54 projects have been approved in 27 States. Problem areas being explored in these projects deal with some type of home care services for the chronically ill and the aged. Other problem areas concern community organization for improved or expanded services, dental health, and referral services.

A recent project grant under this program was given to the Age Center of New England for a study of methods of preventing dependency in later years. Working with one thousand older people in Boston, the Age Center will attempt, through an interviewing and counselling program, to help older people improve their perception and understanding of their own aging and, hopefully, discover resources within themselves to cope with their later years.

Public Welfare Amendments of 1962

These amendments represent the most important legislation in the area of public welfare since the original Social Security Act of 1935. The amendments emphasize rehabilitation, the prevention or reduction of dependency, and the training of public welfare personnel. They liberalize assistance payments and give the States significant new tools for making welfare programs more effective.

For the needy aged the most noteworthy provisions are:

- Increased Federal sharing of the cost of certain rehabilitation services from 50 to 75 percent effective September 1, 1962. In the field of aging, such services are to be directed toward helping elderly assistance recipients to remain self-sufficient or, in the case of those who are disabled or institutionalized, to help them achieve a greater degree of self-care and return to their homes.
- Application of the 75 percent matching feature to funds for training personnel for State or local welfare agencies.
- Increase in the Federal participation in old-age assistance payments by about \$4 per recipient. The temporary \$1 increase in these payments provided by the 1961 amendments has also been extended. The ceiling for Federal matching is increased from \$66 to \$70. Since the Federal Government continues to share, to a \$15 limit, in payments made directly to the suppliers of medical care in behalf of old-age assistance recipients, the average monthly maximum for Federal sharing in old-age assistance payments is now \$85.

- As a means of encouraging self-help, States are now required to take into account expenses attributable to employment in determining the need of an assistance recipient; formerly, such consideration was optional and not always given.
- States may exempt the first \$10 and one-half of an additional \$40 of earned income in determining the need of an old-age assistance recipient.
- To stimulate new approaches to the problems of the needy, demonstration projects and pilot studies are encouraged. The Secretary of Health, Education, and Welfare may waive State plan requirements in connection with such projects, and Federal funds up to \$2 million annually are made available to help finance them.

All of the States and territories are taking prompt steps to put the new provisions into effect. As of mid-September, 18 States showed increases in average payments because all or part of the additional Federal financial participation was passed on to recipients; five States were asking 75 percent Federal financial participation in services and training; and seven others sought 75 percent Federal financing for costs of staff training only.

Drug Amendments of 1962

Since older persons are the heaviest users of drugs, this legislation has particular significance for them. The amendments establish new safeguards for drug research, manufacture, and distribution, provide for more adequate information on drug labeling and advertising, and confer on the Department of Health, Education, and Welfare standby authority for standardization of "generic names" for drugs. In particular, the legislation requires that new drugs be approved as effective, as well as safe, before marketing. Because older persons have lower than average incomes and higher than average medical care costs, it is most important that their medical care dollars not be wasted on ineffective drugs and medicines.

Institute of Child Health and Human Development

This legislation provides for the establishment within the Public Health Service of a new National Institute of Child Health and Human Development. This institute will conduct and support basic research on human development, employing an integrated approach to the study of the growth and development of man from conception throughout the life span. The studies of the aging process will be an important part of this work and the Center for Aging Research, formerly a part of the Division of General Medical Sciences, will become a part of the new institute.

Other Legislation

Certain Federal income tax provisions affecting the aged were liberalized by legislation enacted in 1962. The maximums on deductible medical expenses have been increased to as much as \$40,000 if the taxpayer and his spouse are aged 65 or over and are disabled. Those with high incomes and high medical expenses will, of course, be the chief beneficiaries. Also, annuity plans which include accident, health, sickness, and medical benefits for retirees may now qualify for tax savings. Previously employers could take tax deductions for their contributions to employee pension plans only if the pension and health benefits were provided under separate plans.

Another amendment to the Internal Revenue Code liberalized the retirement income credit provisions so that people who do not get social security, railroad retirement, or veterans' benefits but who get other retirement income, such as government or private pensions, will get a tax credit that corresponds more closely to the tax preference given to recipients of social security, railroad retirement, and veterans' benefits.

The Self-Employed Individuals Tax Retirement Act of 1962 makes a significant step forward in giving self-employed persons, such as professionals and farmers, the same kind of favorable income tax treatment that is accorded to employees under qualified pension plans established by employers for the benefit of employees. The purpose of the new law is to encourage the establishment of voluntary pension plans by self-employed individuals. One-half of the self-employed person's fund set aside, up to a maximum of \$2,500 a year, for investment into qualified retirement funds are deductible from current income for Federal income tax purposes, and the earnings on such funds will be entirely exempt from current taxation.

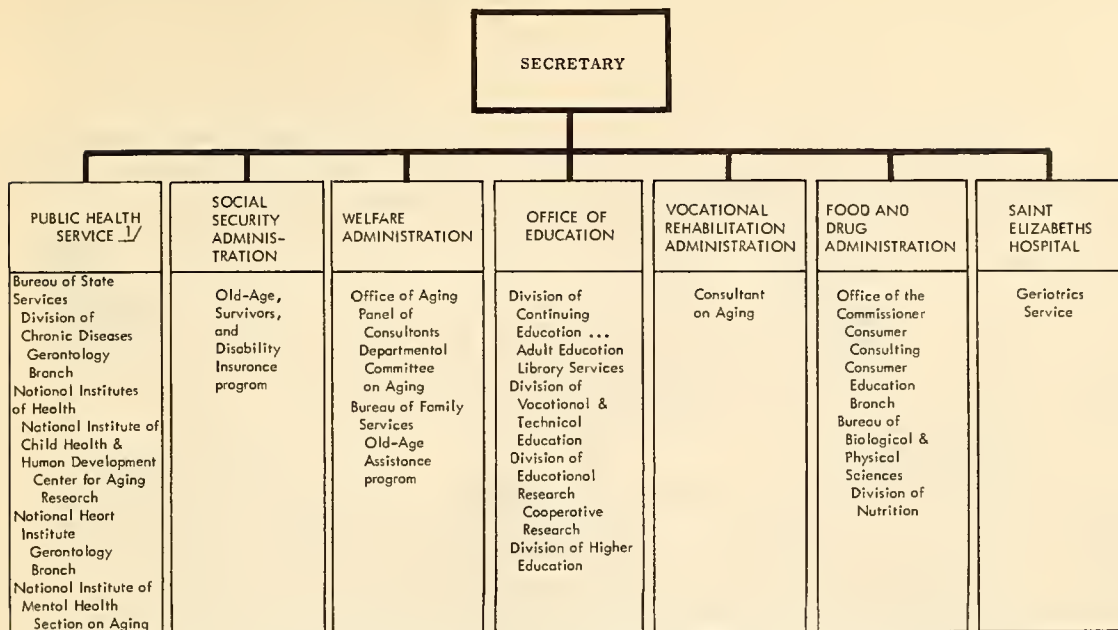
The Senior Citizens Housing Act of 1962 provides additional funds for low and moderate cost housing, both urban and rural, for the elderly. The major changes accomplished through this legislation are in the rural housing program; direct loans mortgage insurance, and grants are provided. In addition, under the existing program of low-interest direct loans to provide rental housing for the elderly, the appropriation ceiling for loans has been raised from \$125 million to \$225 million.

Thus, the legislation enacted by Congress during 1961 and 1962 has been the basis for many of the advances that the Department has made in behalf of the elderly; it is also providing substantial aid to State and community programs.

GAINS IN SERVICES, INFORMATION, AND GUIDANCE, 1961-63

Within the Federal government a number of Departments have responsibilities and programs related to the Nation's older population: the Departments of Agriculture; Commerce; Labor; Treasury; and Health, Education, and Welfare together with the Housing and Home Finance Agency, the Veterans Administration, and the Civil Service Commission. The Secretaries and other heads of these governmental agencies are members of the President's Council on Aging, which develops legislative proposals and plans other measures to strengthen and coordinate Government-wide activities benefiting the aged. The Secretary of the Department of Health, Education, and Welfare serves as chairman of the President's Council on Aging.

A major role in the field of aging has been assigned to the Department of Health, Education, and Welfare. To expand and coordinate the Department's work, Secretary Celebrezze, effective January 28, 1963, has established a Welfare Administration under the Direction of Dr. Ellen Winston within the Department. The shift of the Special Staff on Aging, headed by a Special Assistant to the Secretary for Aging, to become the new Office of Aging within the Welfare Administration will improve coordination and aid in the expansion of services to the aged. The major components of the Department concerned with the problems of senior citizens, and the new Office of Aging that will serve as the focal point of that concern, are indicated in the chart that follows.



This organizational structure reflects administrative changes affecting the aged that were made in the Public Health Service effective November 27, 1962 and in the Social Security Administration, the new Welfare Administration, and the Vocational Rehabilitation Administration (formerly the Office of Vocational Rehabilitation) effective January 28, 1963. ^{1/} Other offices devoting part of their resources to the elderly are: (a) within the Bureau of State Services the Nursing Homes Branch (Division of Chronic Diseases) and the Divisions of Nursing, Community Health Services, Hospital and Medical Facilities (Hill-Burton), Dental Public Health and Resources, and Accident Prevention; and (b) the Bureau of Medical Services.

Welfare Administration

The new Welfare Administration incorporates the Office of Aging (formerly the Special Staff on Aging), the related Departmental Committee on Aging and the Panel of Consultants, and the Bureau of Family Services (formerly a part of the Social Security Administration). The Office of Aging has over-all responsibility within the Department of Health, Education, and Welfare for program planning, guidance, coordination, and public information and education on problems of aging. One of the principal activities of its predecessor organization was to plan and conduct a conference of State Executives of programs in aging to extend the work of the White House Conference and regional levels. It subsequently helped to organize many national and regional conferences, including the 12 White House Regional Conferences on Senior Citizens, for which it had primary responsibility. In addition, the Special Staff on Aging provided technical assistance, consultation, materials, and directory information to State planning and coordinating agencies; to the President's Council on Aging; and to the foreign visitors, private organizations and individual educators, writers, and researchers. These efforts will go forward.

Among the publications issued by the Special Staff on Aging were Reports and Guidelines from the White House Conference on Aging and a number of case studies of successful programs for older people published under the general title of Patterns for Progress in Aging. The monthly publication Aging contains news of activities in all parts of the country of particular interest to persons working in the field of aging. The new Office of Aging will continue and expand such publishing efforts.

The Bureau of Family Services administers the Federal share of all the State programs for needy older people, including programs for medical care. One of the most striking developments in connection with the aged has been the decline in the number of persons receiving old-age assistance from 2.8 million, or 22.5 percent of the population aged 65 and over, in 1950 to 2.2 million and only 12.7 percent of the aged population in 1963. This trend is the more remarkable in view of the fact that the number of persons aged 65 and over increased by 5.2 million persons from 12.3 million to 17.5 million in the interim. Average monthly payments between the end of 1960 and March 1963 increased 10 percent from \$68.45 to \$76.67 due in part to increased Federal participation in assistance grants authorized by legislation passed in 1961 and 1962.

The proportion of persons who concurrently receive old-age assistance and old-age, survivors, and disability insurance benefits rose steadily from less than one-tenth of the total OAA caseload in 1950 to slightly more than one-third of all OAA recipients in mid-1962.

Much more needs to be done to provide adequate skilled nursing homes. At present about half of all persons in nursing homes and homes for the aged are supported by old-age assistance. The Bureau of Family Services works cooperatively with the Public Health Service and with State Departments of Welfare to improve the care of older people in nursing homes and other non-medical institutions and to establish and maintain standards for such institutions.

The Department of Health, Education, and Welfare is actively working with the States to expand and improve the program of medical assistance for the aged under the Kerr-Mills approach. Authorized by legislation enacted in 1960, the MAA program by March 1963 included 29 States with programs in effect and payments in behalf of 118,000 recipients; total payments for the month amounted to \$24 million, or an average of \$203 per recipient. A substantial proportion of the MAA recipients during the initial months of the new program represented transfers from the old-age assistance rolls.

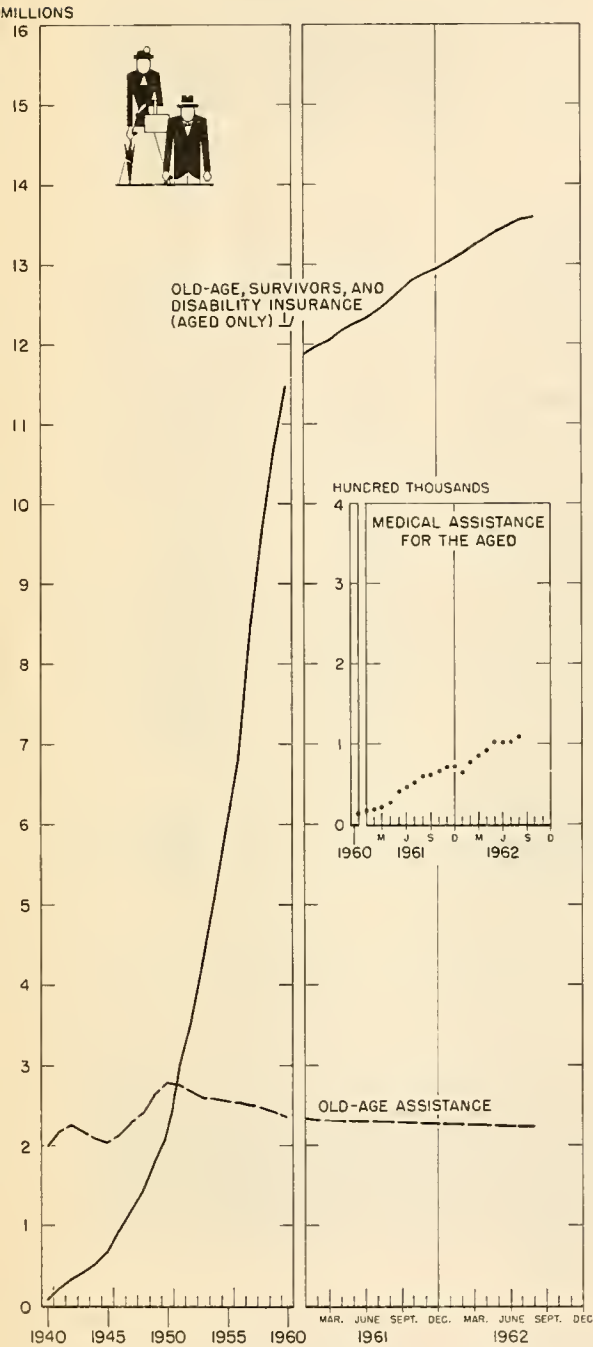
Social Security Administration

The Social Security Administration studies the needs and problems of older people, including income security, health security, and social needs. With respect to the aged, the Social Security Administration has considerably expanded its research. Previous studies were limited to persons directly served by Social Security income-maintenance programs, old-age, survivors and disability insurance and federally-aided public assistance programs. A new survey scheduled for January 1963 will be the first under the auspices of the Social Security Administration designed to measure the economic and social situation of a representative sample of all aged persons in the United States. Furthermore it will include persons 62 to 64 years of age--as well as those 65 years and over--to give some insight into the situation of persons just approaching retirement, and those who elect to retire earlier under Social Security at reduced benefits.

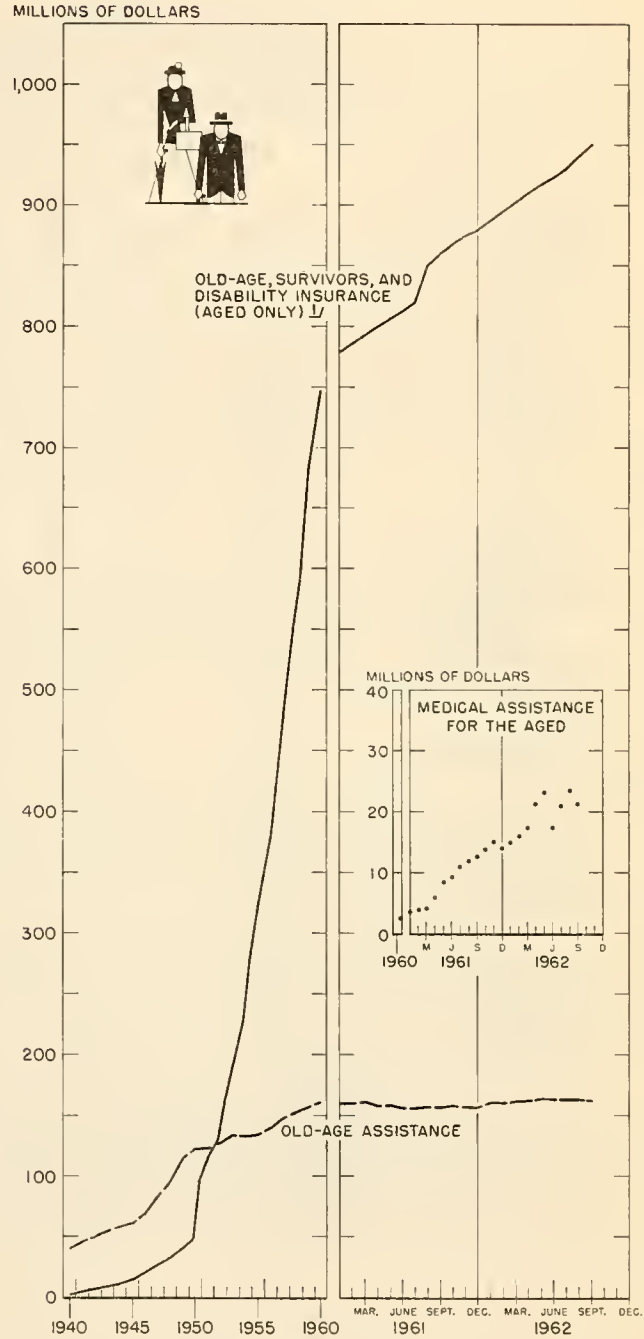
This survey will serve the needs of the statutory Advisory Council on Social Security financing which held its first meeting on June 10-11, 1963. In considering possible recommendations as to benefit levels and the retirement test provisions, the Council will need information not only for social security beneficiaries but also, on a comparable basis, for other aged persons.

OLD-AGE AND SURVIVORS INSURANCE AND OLD-AGE ASSISTANCE

INDIVIDUALS RECEIVING PAYMENTS



PAYMENTS



¹ Receiving old-age, wife's or husband's, widow's or widower's, or parent's benefits.

AGED RECIPIENTS OF SOCIAL SECURITY AND PUBLIC ASSISTANCE BENEFITS, JUNE 30, 1962

State ^{1/}	Number ^{2/} per 1,000 population aged 65 or over ^{3/}		State ^{1/}	Number ^{2/} per 1,000 population aged 65 or over ^{3/}	
	Old-age survivors and disability beneficiaries	Old-age assistance recipients		Old-age survivors and disability beneficiaries	Old-age assistance recipients
Total (All Areas)	687	128			
Rhode Island....	785	68	Kansas.....	673	105
New Hampshire...	770	67	Virginia.....	667	47
Maine.....	768	104	California.....	665	176
Michigan.....	765	79	Wyoming.....	663	98
Oregon.....	753	82	Maryland.....	658	40
Connecticut.....	753	39	Florida.....	657	111
Indiana.....	752	55	Missouri.....	655	211
New Jersey.....	746	31	South Carolina..	641	187
Hawaii.....	744	40	Arizona.....	636	134
Wisconsin.....	743	75	Tennessee.....	636	158
Vermont.....	738	125	Arkansas.....	630	279
Delaware.....	735	31	Colorado.....	614	278
West Virginia...	730	98	Alabama.....	604	375
New York.....	728	33	Mississippi.....	602	407
Pennsylvania....	726	41	Texas.....	593	279
Massachusetts...	720	101	Oklahoma.....	584	334
Idaho.....	720	94	New Mexico.....	583	197
Ohio.....	707	95	Georgia.....	580	308
Washington.....	707	152	Alaska.....	579	227
North Carolina..	699	141	Puerto Rico....	570	292
Illinois.....	698	65	Dist. of Columbia	556	41
Iowa.....	696	95	Louisiana.....	521	502
North Dakota....	692	103	Virgin Islands..	430	266
Utah.....	689	107	Guam.....	16	131
Montana.....	688	91			
South Dakota....	686	110			
Nebraska.....	685	80			
Minnesota.....	679	120			
Kentucky.....	674	183			
Nevada.....	673	131			

Source: U. S. Department of Health, Education, and Welfare; Social Security Administration. ^{1/} Ranked by proportion of persons aged 65 and over who are OASDI beneficiaries. ^{2/} Persons receiving both OASDI benefits and OAA payments are included under both programs in the computation of rates. ^{3/} Preliminary estimate of the population aged 65 and over as of June 30, 1962, prepared by the Social Security Administration. ^{4/} Persons receiving old-age, wife's, husband's, widow's, widower's, and parent's benefits; adjusted to exclude: (a) beneficiaries aged 62-64, (b) wife beneficiaries under age 62 with child beneficiaries in their care, and (c) duplicate counts for beneficiaries receiving both old-age and wife's or husband's benefits.

The survey will for the first time provide information nationally on the characteristics and financial circumstances of aged assistance recipients based on personal interviews rather than case records. It will permit analysis of the characteristics and resources of those aged persons who receive benefits from the Veterans' Administration, from other public programs, or from private pension plans.

The Cooperative Research and Demonstration Program of the Social Security Administration is also sponsoring research about the special needs and problems of the aged. Projects receiving grants in 1961 and 1962 included a study of early retirement, both from the point of view of individual satisfactions and as a means of adjusting the size and nature of the labor force to the changing needs of the economy.

Another project is a study of the adjustment to retirement of a group of older persons followed over a number of years. An investigation of the decisions leading to institutionalization of aged persons is being made to shed light on the special problems of older people who are unable to care for themselves. Support has been given to a demonstration project which will provide protective services for older people in order to help them to continue independent living. Still another project being supported is a comparison of aged people residing in a public housing project with other low-income aged who applied and were turned down.

The Social Security Administration is paying benefits to approximately 14 million aged persons, 1.6 million persons aged 62-64, and 12.4 million aged 65 and over. This represents an increase of more than 2 million aged beneficiaries since the beginning of 1961. Part of the increase is due to the liberalized requirements for insured status and the liberalized retirement test enacted by the 1961 Social Security Amendments.

In the United States in mid-1962, some 68.7 percent of persons aged 65 and over were receiving old-age, survivors, and disability insurance benefits. By State, however, the proportion of persons receiving OASDI benefits varied from 78.5 percent in Rhode Island to 52.1 percent in Louisiana (Table).

SSA administers the old-age, survivors, and disability insurance program through a network of district offices located in principal cities and towns in the United States and Puerto Rico. During 1961 and 1962, 26 additional offices were opened, making a total of 610. The district offices not only provide older people with information and assistance concerning social security benefits, but also furnish referral services to other governmental or community agencies providing health, education, and welfare services. Increased emphasis is being placed on the service needs of beneficiaries, and district office personnel participate actively in local health and welfare councils and other community organizations concerned with the needs of older people.

Public Health Service

All programs of the Public Health Service have at least an indirect bearing on the well-being of the aged since they are concerned with the health of people in all age groups. Recently a number of programs specifically concerned with older people have been developed. A Gerontology Branch, established in 1962 in the Bureau of State Services, plans, coordinates, and furnishes information and guidance for a more effective application of all knowledge affecting the health of the older age groups.

The Bureau of State Services, with project grants authorized under the Community Health Services and Facilities Act of 1961, is supporting a number of studies and pilot projects for the benefit of the aged. These include: (1) courses for health personnel who work in nursing homes; (2) courses in geriatric and restorative nursing; (3) out-of-hospital services for the chronically ill and aged; and (4) mobile dental units which bring dental care to chronically ill and aged people who cannot visit dentists' offices. Over half of the 44 community health project grants awarded by the Public Health Service in 1962 concern some type of home care--nursing, homemaker, physical therapy, community referral, and portable meals, among others--for the chronically ill and aged.

The National Institutes of Health devote a considerable part of their medical research to the problems and illnesses of the aged. The Center for Aging Research, the Gerontology Branch of the National Heart Institute, and the Section on Aging in the National Institute of Mental Health concentrate exclusively on the health problems of the aged.

Health Services

Although most large cities have a number and variety of medical resources, community services often have grown up helter-skelter, with much overlapping, many gaps, and no planned system for efficient development and use of all facilities. An elderly person, with limited energy and meager funds, may have to go from agency to agency to find help. This causes serious and undue hardship.

The Public Health Service recognizes the need for coordination of community resources to achieve continuity of care for the chronically ill and aged. Its programs are encouraging central referral and information services to help patients and their families find and use the needed health and social services.

Accordingly, the Public Health Service has awarded grants to two large metropolitan counties (Dade County--Miami, Florida, and Monroe County--Rochester, New York) for long-range studies in coordination of health and medical services. These studies will consider organizational, administrative, and economic problems with a view toward welding all pertinent public and private organizations into a community-wide program of comprehensive health care.

At the opposite end of the community scale, the Rip Van Winkle Foundation of rural Hudson County, New York (population 11,000) has been awarded a community health project grant to explore the possibilities of nonprofit supplementary services through a group practice clinic. The Foundation will provide on a non-profit basis home nursing, physical therapy, nutrition counseling, social case-work, a dental hygienist, and medical specialty consultation.

Food and Drug Administration

Much of the work of the Food and Drug Administration, although intended for the protection of the public as a whole, is of direct benefit to the aged. This year, for example, after seven years of litigation, the worthless arthritis remedy "Tri-Wonda" was driven off the market. The FDA

also eliminated from the market seawater which was selling at \$1.95 a pint when advertised as a "chemical smorgasbord for ailing glands and organs"-- obviously intended to have a special appeal for the aging. Because older people are the largest users of drugs, all the efforts of the Food and Drug Administration in eliminating short weight or deceptive packaging and in ensuring the safety of drugs benefit the older age groups.

Vocational Rehabilitation Administration

One of the responsibilities of the Vocational Rehabilitation Administration (formerly the Office of Vocational Rehabilitation) is to provide rehabilitation services for the older disabled person. Grants from VRA for research benefiting the elderly exceeded \$2.1 million in 1962. As a part of the increased emphasis on services for older persons, a full time consultant in aging was appointed in 1961 to work intensively with State rehabilitation agencies.

A grant project in New York City resulted in the job placement of 197 handicapped men ranging in age from 60 to over 80. The success of this project stimulated the establishment of ten similar projects.

In one project designed to explore work possibilities for older persons the Vocational Rehabilitation Administration is providing grants for a five-year program, launched in June 1962, to evaluate the response to regular employment of selected disabled men and women over 60 years of age in Coney Island, New York. The disabled trainees will be assigned, on the basis of skills and preferences, to work on 25 to 30 products ranging from hardware to plastic toys. The project is designed to answer the following questions: Does employment ease tensions? Will these older, re-employed persons maintain, or even improve, in health? Will their intellectual competence be retained longer? Will their employment improve family ties?

Office of Education

The Office of Education took the lead in organizing regional conferences on education for aging which were held in seven large universities during the past year. The topics covered three areas: education about aging, continuing education for older people, and educational and community services by older people. A new publication, Adventures in Learning--Frontiers Past Sixty in Hamilton, Ohio, is a case study of an action program developed in response to expressed interests of older people and designed to be of use to community leaders and educators.

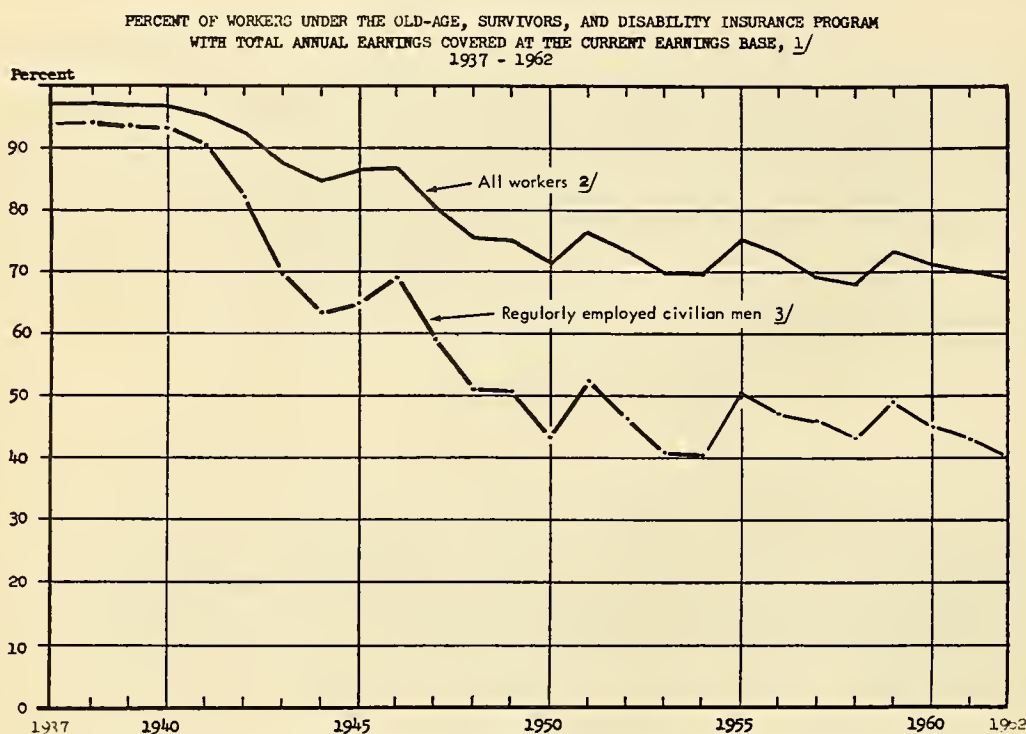
A home economist recently was assigned to work on training programs for the unemployed and underemployed--groups which are expected to include a high proportion of older workers. These programs will train workers as homemakers and in other family and home occupations, thus helping more older persons to find employment in serving other older persons--a two-way gain for the elderly. This undertaking is one of several measures made possible by passage of the Manpower and Redevelopment Act in 1962.

Much has been accomplished during the past two years to improve health and social welfare services for older people. Expanded research activities in the area of aging have laid the groundwork for future progress. But much remains to be done.

GOALS FOR THE FUTURE IN SOCIAL SECURITY AND PUBLIC ASSISTANCE

Adequacy of benefits is an important concern of the social security program. A major factor in benefit adequacy is keeping benefits in line with changes in prices and wages. As wages rise, provision should be made for corresponding increases in benefit payments; otherwise, these payments will more and more reflect the lower wages paid in earlier years and will become increasingly inadequate for the economic security of the retired worker. The question of how to keep social security payments in line with changes in levels of living will need continuing review.

Basic to any consideration of the problem of keeping the program in line with the changing economy is the matter of adjusting the ceiling on the amount of earnings that can be taxed and credited toward benefits. Adjustments in the earnings ceiling to correspond with rises in earnings are important from the standpoint not only of keeping benefits up to date but also of keeping the financial base of the program from shrinking.



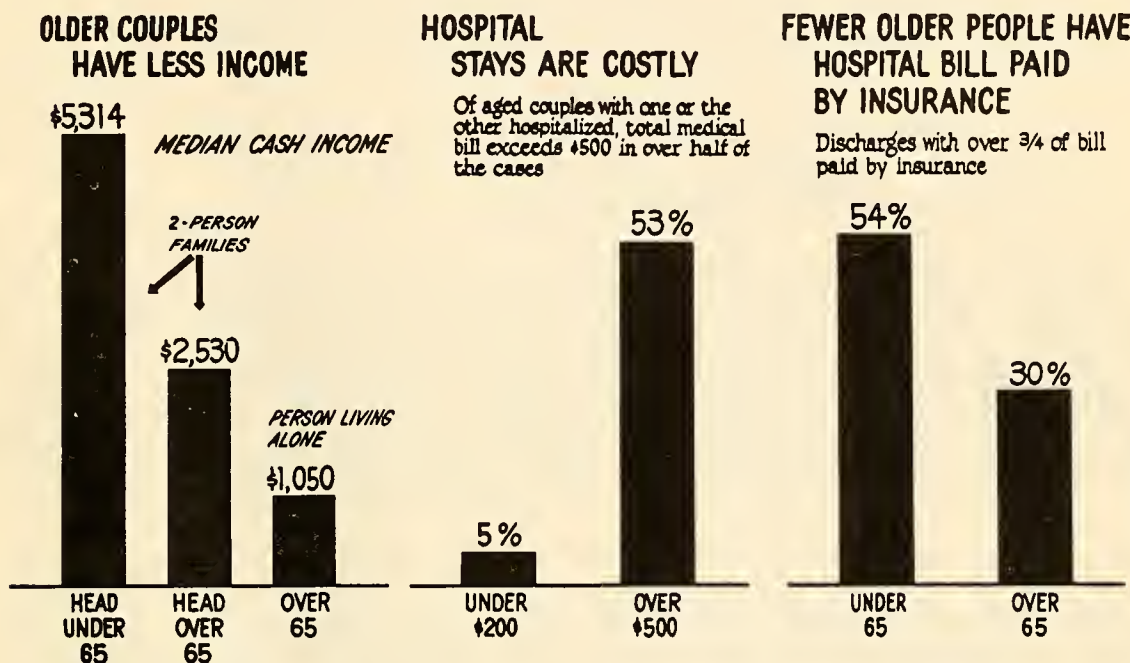
Source: U.S. Department of Health, Education, and Welfare; Social Security Administration, Bureau of Old-Age and Survivors Insurance. ^{1/} The original \$1,000 earnings base was effective from 1937 through 1950; it was increased to \$1,600 beginning with 1951, to \$4,200 beginning with 1955, and to \$1,800 beginning with 1959. ^{2/} Includes self-employed after 1950 and Armed Forces after 1956. ^{3/} Percentage for 1937 estimated.

The coverage of the old-age, survivors, and disability insurance program, broad as it is, still leaves unprotected some gainfully employed people and their families. Extension of coverage under the program to essentially everyone employed would provide assurance to all workers that the protection of the program would follow them from one job to another.

Improvements in the levels of assistance payments in many States are needed if recipients are to have enough income to meet the cost of living essentials. Despite increased Federal sharing in the costs of assistance payments as a result of recent legislation, these payments are not meeting the need in many cases. Likewise, there is inadequate provision to meet the medical care costs of the needy aged. Expansion of medical care programs for the needy aged and a broadening of the scope of services provided under these programs is essential.

Prevention and rehabilitative services must be strengthened if public assistance measures are to be used as a constructive force in dealing with the many social problems facing our Nation. Nowhere is the need more urgent than in the field of aging. The Public Welfare Amendments of 1962 provide the foundation for a greatly improved level of services on the State and local level which can help older people maintain independence and self-care and, in some cases, prevent or reduce the ultimate need for public assistance. The low level of older people's incomes, their medical care expenses, and their lack of means to meet these expenses are charted below.

HOSPITALIZATION COSTS AND OLDER PERSONS



Source: U.S. Department of Commerce, Bureau of the Census; U.S. Department of Health, Education, and Welfare--Public Health Service, National Health Survey Division; and Social Security Administration, Bureau of Old-Age and Survivors Insurance.

New Horizons in Aging: Shared Responsibilities

Aging is a common denominator of living. The very success of past efforts to conquer the diseases and deprivations which cut life short have generated new needs and new problems--how to assure economic security in retirement years; how to provide opportunities for older people to play meaningful roles in an essentially youth-oriented society.

The basis for independent retirement was laid in the establishment of the social security system in the mid-1930's. The social security approach--responsible provision during the working years for the retirement years--has been proved. The extension of this approach to cover medical care costs is of vital importance in the 1960's. Beyond that, the broadened approach of adding life to years through fostering independent living, educational opportunities, and the like becomes the shared responsibility of Federal, State, and local agencies, of private organizations, and individuals.

MEDICAL CARE FOR THE AGED UNDER PUBLIC ASSISTANCE

Helen E. Martz

Public Law 86-778--popularly known as the Kerr-Mills legislation--

established a program of medical assistance for the aged (MAA), with Federal aid to the States for medical assistance to older persons not receiving old-age assistance but whose income and resources are insufficient to meet the cost of needed medical care; and

provided additional Federal aid to the States for payments to suppliers of medical care under existing old-age assistance programs (OAA).

By December 1962, 28 jurisdictions (25 States, Guam, Puerto Rico, and the Virgin Islands), established medical assistance for the aged programs; 28 jurisdictions expanded or improved coverage or content of medical care services previously provided under old-age assistance programs; and 11 jurisdictions began to pay for medical care services for the first time under old-age assistance. Direct payments to suppliers of medical care (vendor payments) increased 60 percent between 1960 and 1962 for all public assistance programs; over half the increased expenditures were used for aged persons under MAA.

Dr. Martz is a Social Welfare Adviser in the Bureau of Family Services, Welfare Administration. See also: (1) House Ways and Means Committee, "Medical Resources Available to Meet the Needs of Public Assistance Recipients," and "Medical Care Under Public Assistance;" (2) Senate Special Committee on Aging, "Performance of the States--Eighteen Months of Experience with the MAA (Kerr-Mills) Program;" (3) The Bureau's "Financial Eligibility, Medical Assistance for the Aged," "Casework Services in Public Assistance Medical Care," and "Characteristics of State Public Assistance Plans Under the Social Security Act: Provisions for Medical and Remedial Care;" "Medical Care in Public Assistance, Organization and Administration--Guides and Recommended Standards;" (4) "The Older Population," and "New Horizons for the Aged," in the November 1962 and January 1963 issues respectively of Health, Education, and Welfare Indicators; and (5) Social Security Administration, "The Health Care of the Aged."

Health, Education, and Welfare Indicators, March 1963
Revised

Local and State public welfare agencies traditionally provided some medical care through staff physicians, by operating institutions giving medical care to the indigent, or by paying for the medical care given to needy persons. Systems of home medical services for the "poor" had been established under public auspices before 1930 in many of the larger cities; and a great many other cities, many counties, and some States furnished at least emergency medical service to persons for whom public responsibility otherwise had been assumed.

The Federal Government provides hospitalization and other types of medical care for members of the armed forces, veterans, merchant seamen, Indians, and certain other groups. But general medical care as an essential relief need was not accepted as a Federal responsibility until the economic depression of the 1930's. Between 1933 and 1935, Federal funds for the payment of medical care costs of the needy unemployed were first made available to States through the Federal Emergency Relief Administration.

The Social Security Act passed in 1935 made no special provision for medical assistance, but Federal financial participation was available to States in the costs of medical care when included in the monthly payment to recipients of old-age assistance, aid to the blind, and aid to dependent children within the limits of the Federal maximum on the monthly assistance payment. Although amendments to the Social Security Act in 1939, 1946, and 1948 increased the maximums on Federal participation in the money payment, the medical care that could be provided within the money payment was limited, and its nature and extent varied greatly between States, and often between localities in the same State.

Subsequent amendments to the Social Security Act increased the amount of Federal funds available to the States for medical care. In 1950, the definition of assistance was broadened to include payments for medical care or other remedial care made directly to suppliers of such services (vendor payments). However, these vendor payments had to be within existing maximums on Federal participation, which at that time were on an individual case basis. The 1950 amendments also authorized an additional category of assistance, aid to the permanently and totally disabled, and medical care was available for recipients of this program on the same basis as for the aged, blind, and dependent children.

In 1956, the Federal share of medical care costs in all categories was increased by establishing separate Federal matching for medical care payments over and above the cash assistance payment. In 1958, the basis for Federal sharing in State expenditures was changed to a general averaging formula which included both vendor and money payments. This averaging formula made it possible to share with the States in larger medical expenditures in individual cases provided the maximum average was not exceeded.

By 1960, more than four-fifths of the Nation's jurisdictions had medical vendor provisions in their federally aided public assistance programs, and many of the jurisdictions provided for some items of medical

care in the money payment to recipients. To meet the needs of the unemployed and others not included under these public assistance programs, local systems of home medical care were extended, and legislation in several States gave public welfare departments responsibility for medical care of their beneficiaries. State and local governmental support for the hospital care of "medically needy" as well as of "needy" persons also increased.

Nonetheless, even with this expanded Federal and State effort, the need was so great that the majority of the States were able to provide for only limited medical care, financing one or more services, but not the broad scope of services needed by most sick people.

KERR-MILLS LEGISLATION

The increasing need of the aged for medical care, and its higher cost, resulted in further amendment to the Social Security Act in September 1960. Under the Kerr-Mills legislation, a new category of public assistance--medical care for the aged (MAA)--was established, and additional Federal funds were made available for vendor payments for medical care under existing old-age assistance programs.

Under MAA, the Federal Government shares with States in the total cost of the program without limitation on either the individual payment or total State expenditures. The amount of Federal participation ranges from 50 to 80 percent of medical care expenditures paid to suppliers of medical care in behalf of eligible recipients, the higher percentages going to States with low per capita income.

States may make available a broad range of medical services: (1) physicians, dental, private duty nursing, physical therapy and related services; (2) inpatient hospital, out-patient hospital or clinic, skilled nursing home, and home health care; (3) laboratory, x-ray, diagnostic, screening, and preventive services; (4) prescribed drugs and appliances including eyeglasses, dentures, and prosthetic devices; and (5) any other medical or remedial care recognized under State law. The States determine the kinds and extent of services for which costs will be assumed and the conditions of eligibility for such services.

Relatively few conditions are imposed by the Federal act: (1) the State must include some institutional and some noninstitutional care; (2) a durational residence requirement is not permitted; (3) no charge, such as an enrollment fee or premium, is permitted as a condition of eligibility; (4) a lien may not be placed against the property of any individual prior to his death on account of medical assistance properly paid in his behalf, and recovery of such assistance cannot be made except from his estate after the death of the surviving spouse, if any; and (5) disclosure of information concerning applicants and recipients is restricted to purposes directly connected with the administration of the program.

In addition to the usual share in old-age assistance payments, the Federal Government under the 1961 legislation provides an additional amount based on expenditures for payments to suppliers of medical care up to a monthly maximum averaging \$15 per recipient. The additional funds are intended to enable States to improve or to initiate medical care services in their old-age assistance programs.

State Implementation of Medical Assistance for the Aged

Medical Assistance for the Aged, December 1962			
State	Number of Recipients	Vendor payments (in dollars)	
		Total (000's)	Average
All	109,815	22,515	205
Alabama.....	254	70	274
Arkansas.....	1,959	101	52
California.....	15,885	4,301	271
Connecticut.....	4,536	1,002 ^{1/}	221
Hawaii.....	546	120	220
Idaho.....	1,342	179	134
Illinois.....	858	392	457
Kentucky.....	2,583	49	19
Louisiana.....	313	66	210
Maine.....	248	65	263
Maryland.....	6,177	234	38
Massachusetts...	21,830	4,001 ^{1/}	183
Michigan.....	4,954	1,581	319
New Hampshire...	106	3	
New York.....	29,151	7,882	270
North Dakota....	895 ^{2/}	189 ^{1/}	211
Oklahoma.....	553	104	188
Oregon.....	510	61	119
Pennsylvania....	5,318	1,355	255
South Carolina..	587	101	171
Tennessee.....	946	54	57
Utah.....	1,537	210	137
Vermont.....	59	24	400
Washington.....	848	151	179
West Virginia...	6,171	170	28
Guam ^{3/}	88	4 ^{4/}	1
Puerto Rico ...	1,082	48	44
Virgin Islands ^{3/}	479	1	3

1/ Includes money payments not subject to Federal participation as follows: \$488 in Connecticut, \$97,438 in Massachusetts, and \$2,181 in North Dakota. 2/ Includes cases receiving only money payments. 3/ Data for November. 4/ Less than \$500.

By December 1962, 25 States and three other jurisdictions were administering MAA (Table), and four additional States had authority for establishing such a program, but had not yet implemented it (Georgia, Iowa, New Mexico, and Virginia).

There were 110,000 recipients of MAA in December 1962 (Chart). During the first two years of the program, nearly one-fourth of the approved cases had been transferred from other assistance programs, primarily in States that paid for nursing home care, to gain more favorable Federal financial participation (California, Connecticut, Idaho, Massachusetts, New York, and North Dakota).

Between October 1, 1960, the effective date of MAA and September 30, 1962, a total of \$323 million was expended under MAA; \$160 million, or 49.5 percent came from Federal funds, and \$163 million from State and local funds (Table). About 88 percent of the expenditures were made by four States (California, Massachusetts, Michigan, and New York).

There is considerable range among the participating States in the number and proportion of persons receiving medical care under MAA, and in the average payment per recipient. For example, in December 1962, the number aided ranged from 59 in Vermont to 29,000 in New York. About two-thirds of the recipients were in three States (California, Massachusetts, and New York). Average MAA payments ranged from \$19 in Kentucky to \$457 in Illinois. The average payment per recipient for all States was \$205. States having high average payments were widely scattered throughout the country (Map).

Most States began conservatively. By December 1962, only three States had a comprehensive program (i.e., provide care in each of the five major areas of medical services--physicians' services, dental care, hospitalization, nursing home care, and prescribed drugs). Six additional States gave some care in each of the major areas but with significant limitations on the condition for which care would be provided or the extent of such care. Five States provided only the two minimal institutional and noninstitutional services required by law (Table).

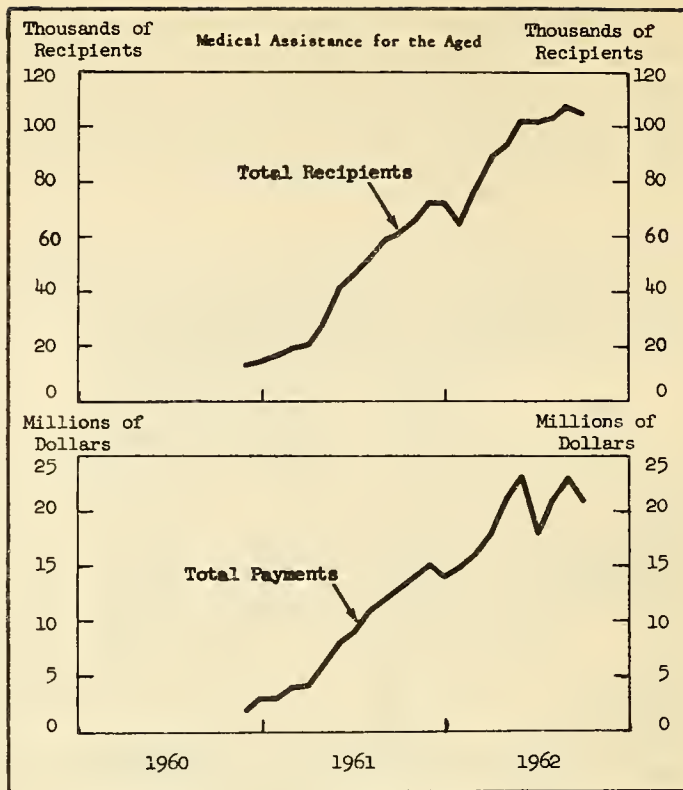
Of the 28 jurisdictions, eight included more of the major kinds of medical services in MAA than in OAA; ten had substantially the same scope of such services in the two categories; and nine provided fewer of the major medical services in MAA than in OAA.

Basis of Eligibility for Medical Assistance for the Aged

In more than half the 28 jurisdictions, persons otherwise eligible can receive help under MAA only after health insurance or such other potential resource has been utilized. Nine jurisdictions include a \$50 or \$100 deductible feature--an amount which must have been obligated by an individual in a year for medical care before he can be eligible for participation in the program.

The basis on which eligibility for MAA is determined is only slightly higher than that used for old-age assistance, as evidenced by the consideration given to income and other resources:

1. Most jurisdictions use a specified level of income in determining financial eligibility. In 10 jurisdictions, the income figure represents the amount considered as needed for living expenses, and income or available assets beyond that amount are evaluated against the probable cost of medical care needed by the individual. The most liberal annual income level used by a State is \$2,000 for a single person; the most common is \$1,500--a level approximating the highest under a State OAA program for essential maintenance costs.



Total Expenditures for Medical Assistance for the Aged
By Source of Funds
October 1, 1960 through September 30, 1962

State	Total expenditures 1/ (Thousands of dollars)		
	Total	Federal	State and local
All States 2/	323,126	160,303	162,823
Alabama.....	274	207	67
Arkansas.....	656	492	164
California.....	33,631	16,779	16,852
Connecticut.....	4,210	1,860	2,350
Hawaii.....	1,159	614	545
Idaho.....	2,538	1,644	894
Illinois.....	1,697	849	848
Kentucky.....	544	356	188
Louisiana.....	747	499	248
Maine.....	570	373	197
Maryland.....	2,703	1,333	1,370
Massachusetts....	80,258	38,751	41,507
Michigan.....	28,688	14,323	14,365
New Hampshire....	17	10	7
New York.....	141,710	68,060	73,650
North Dakota.....	2,149	1,488	661
Oklahoma.....	1,453	953	500
Oregon.....	551	284	267
Pennsylvania.....	6,575	3,288	3,287
South Carolina...	1,276	932	344
Tennessee.....	538	340	198
Utah.....	822	515	307
Vermont.....	8	4	4
Washington.....	2,816	1,401	1,415
West Virginia....	6,942	4,651	2,291
Puerto Rico.....	540	270	270
Virgin Islands...	54	27	27

1/ Vendor payments (payments made directly to the suppliers) and administrative costs. 2/ Assistance payments not yet reported by Guam.

2. Twenty-six of the 28 jurisdictions exclude life insurance from consideration as an asset under specified conditions, such as: 12 States, usually within a dollar maximum ranging from \$500 to \$3,000, with \$1,000 the usual limit; and 13, within the dollar maximum for all personal property. The other three jurisdictions provide for full utilization of any cash resource available from insurance.

3. All 28 jurisdictions take into account the availability of other personal property to meet medical care costs. In 26, there are dollar limits on the amount that may be held without affecting eligibility. These range from \$50 to \$2,800, with most between \$1,000 and \$2,500. Nine include both real and personal property within the State limit.

4. All jurisdictions exempt real property used as a home, but six require that equity in the home not exceed a stated amount. One jurisdiction does not allow holding other real property, and seven require it to be income-producing or utilized to apply to medical care costs. Of the other 20 jurisdictions, some require the value of other real property in excess of certain limits to be applied to medical costs, and others specify limits on the value of such property which may be held.

Extended Medical Care Provisions Under Old-Age Assistance

All 54 jurisdictions made vendor payments for medical care services for OAA recipients in December 1962. Increased funds under the Kerr-Mills legislation enabled 11 jurisdictions which had no vendor payment programs for OAA recipients before September 1960 to incorporate such provisions. Twenty-eight jurisdictions which already had vendor payment programs made their programs more comprehensive.

Average Payment Per Recipient For Vendor Payments For Medical Care
December 1962

DOLLARS

- No Program
- Program In Operation But No Payments,
- Less Than 100
- 100-199
- 200 or More

ALASKA
HAWAII
GUAM
P. R.
V. I.

The average vendor payment per recipient of old-age assistance for medical care increased from \$11 in September 1960 to \$15 in December 1962. Average payments ranged from a low of \$0.41 in Arizona and Montana to a high of \$72 in Wisconsin (Table). States with a high average vendor payment for medical care were largely concentrated in the Northeast, Northcentral, and the Pacific Northwest areas. Averages were generally low in the Southeast, the Rocky Mountain area and the territories (Map).

By December 1962, 24 jurisdictions provided a relatively comprehensive scope of services--14 made vendor payments in each of the five major kinds of medical care (physicians' services, dental care, hospitalization, nursing home care, and prescribed drugs); and 10 used the vendor payment method for four services and the money payment for nursing home care.

Of the other 30 jurisdictions providing vendor medical care payments, six provided four of the major services; two provided three of the major services plus money payments for nursing home care and one other service; five provided hospital and nursing home care plus other physicians' services or prescribed drugs; and 17 provided one or two of the major services, usually hospitalization (Chart).

FEDERAL-STATE COOPERATION

The Kerr-Mills legislation gave the Secretary of Health, Education, and Welfare responsibility for (1) developing and revising guides and recommended standards as to the level, content, and quality of medical care services;

Medical Care Services Under Medical Assistance For The Aged
December 1962

Service	Availability, by number of Jurisdictions	Limitations
Physicians' services	27	In three jurisdictions only on an out-patient clinic basis; in 11, limitations on number of visits during a given period or nature of illness or condition covered.
Dental care	13	Some restrictions in all jurisdictions; e.g., one restricted dental care to persons in nursing homes, and most did not provide for dentures.
Hospitalization	28	Varying limitations as to number of days of hospital care and the nature of medical need; e.g., emergency or life endangering conditions.
Nursing home care	20	In four jurisdictions only post-hospital care.
Prescribed drugs	17	In five jurisdictions only on limited basis or directly related to hospital or nursing home care.

for use by States in evaluating and improving their medical care provisions; (2) securing periodic reports from the States on items included in, and the quality of, medical care and services for which expenditures are made; and (3) publishing data secured from these reports and other information. These functions were delegated to the Bureau of Family Services in the Welfare Administration (formerly the Bureau of Public Assistance in the Social Security Administration).

Since enactment of the Kerr-Mills legislation, the Bureau of Family Services has strengthened its medical care resources to assist the States in the development of State legislation and other planning necessary to put the new medical care provisions into effect. A new Division of Medical Care

Standards was established in the Bureau early in 1961, with responsibility for developing guide materials and recommended standards, and for providing consultation in the area of medical care services and health plans of State public assistance agencies. A medical advisory group, including physicians and specialists in paramedical areas, was also appointed to advise the Bureau on specific problems relating to medical needs and services to needy people.

Consideration of major policy issues, development of instructional material for State use, and the issuance of interpretive materials on the new provisions were given high priority. Policy and administrative questions were discussed with departmental, regional, and State agency staff, and with other interested agencies and groups, such as the American Medical Association, American Hospital Association, American Pharmaceutical Association, American Nursing Home Association and the American Public Health Association. In addition, the Bureau participated on the American Medical Association's Committee on Indigent Care, on the American Public Welfare Association's Medical Care Committee, and on various committees of the American Hospital Association and American Nursing Home Association.

Federal requirements were developed for use by States in initiating and operating their MAA programs. Consultation was also provided to State agencies on the development of necessary State legislation and plans to put the new medical care provisions into effect. State officials met with Bureau staff in Washington to consider specific State situations, and special legislative sessions were held in many States to obtain a legal base and appropriations for initiating new, or modifying existing, programs.

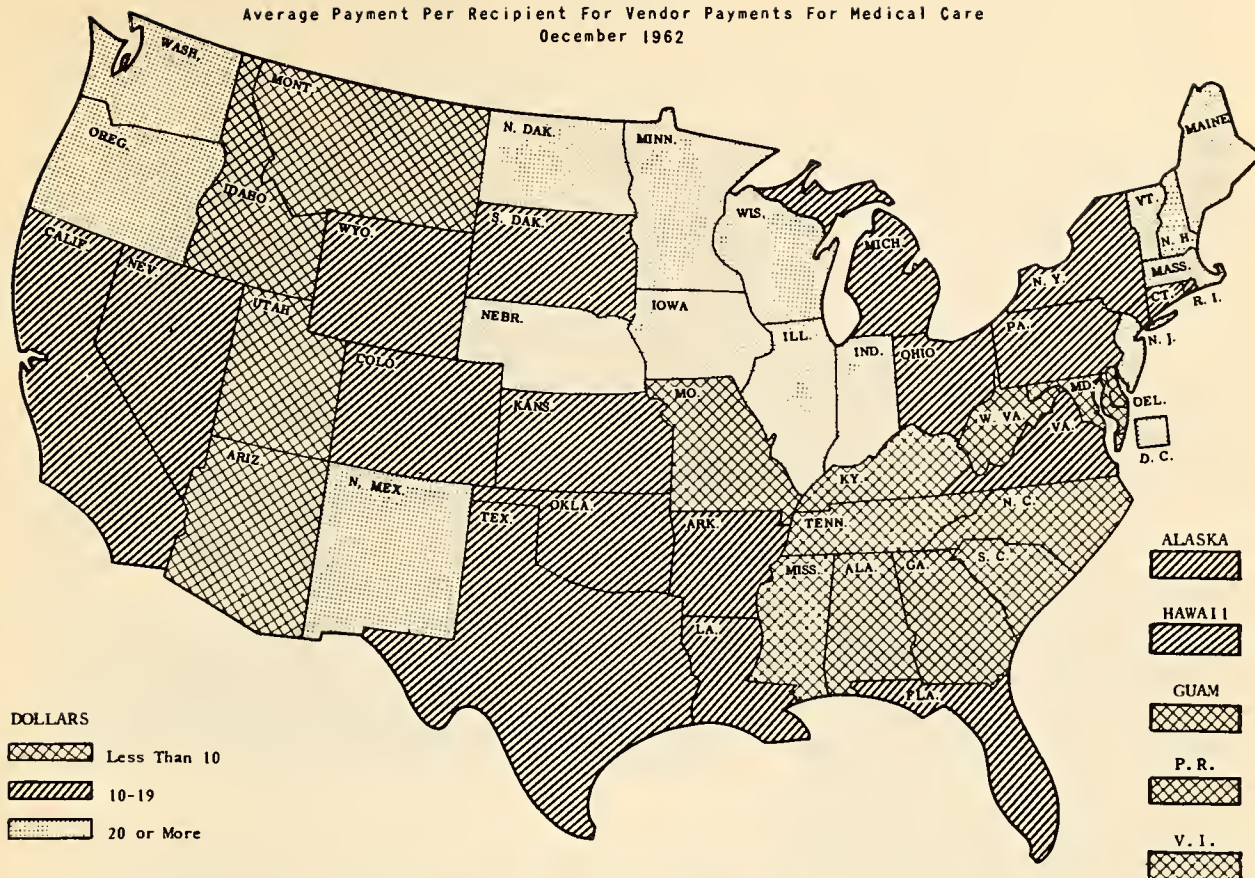
The medical advisory group met several times a year to assist in the development of medical care guide materials and standards. In addition, some of the consultants made fact-finding and consultative trips to several States in connection with the administrative and pharmaceutical aspects of medical care, and a sub-committee advises the Bureau in the selection of more urgent medical care areas for special study. Regional meetings are being planned jointly with the American Hospital Association to promote closer working relationships between staff of both agencies.

Guide materials were prepared and issued by the Bureau to help States expand and strengthen their medical care programs, including such publications as "Financial Eligibility: Medical Assistance for the Aged;" "Casework Services in Public Assistance Medical Care;" "Reports on Cooperative Action Between State and Local Health and Welfare Agencies;" and "Medical Care in Public Assistance, Organization and Administration--"Guides and Recommended Standards." In addition, pertinent materials issued by other groups were distributed by the Bureau to States, including "Medical Assistance for the Aged and Nursing Services in the Home," prepared jointly by the Bureau and the Public Health Service and issued by the Public Health Service; "Your Nursing Services Today and Tomorrow," Public Affairs Pamphlet # 307; and "Guides for Drug Expenditures for Welfare Recipients," prepared jointly by the American Public Welfare Association and the American Medical Association.

Average vendor payments per recipient of old-age assistance for medical care		
State	Average payment per OAA recipient (in dollars)	
	September 1960	December 1962
All	11	15
Alabama ^{1/}	2	8
Alaska	---	13
Arizona	---	2
Arkansas ^{1/}	7	12
California ^{1/}	10	12
Colorado	17	19
Connecticut ^{1/}	19	18
Delaware	---	3
District of Columbia	8	35
Florida	6	14
Georgia	---	6
Hawaii ^{1/}	6	16
Idaho ^{1/}	9	10
Illinois ^{1/}	34	36
Indiana	21	29
Iowa	8	31
Kansas	12	17
Kentucky ^{1/}	---	3
Louisiana ^{1/}	2	14
Maine ^{1/}	13	26
Maryland ^{1/}	6	9
Massachusetts ^{1/}	46	21
Michigan ^{1/}	11	10
Minnesota	37	62
Mississippi	---	1
Missouri	2	6
Montana	2	2
Nebraska	25	32
Nevada	6	20
New Hampshire ^{1/}	17	22
New Jersey	35	46
New Mexico	9	21
New York ^{1/}	33	16
North Carolina	2	7
North Dakota ^{1/}	35	25
Ohio	11	17
Oklahoma ^{1/}	12	15
Oregon ^{1/}	29	35
Pennsylvania ^{1/}	4	10
Rhode Island	15	15
South Carolina ^{1/}	3	4
South Dakota	---	13
Tennessee ^{1/}	1	5
Texas	---	11
Utah ^{1/}	5	9
Vermont ^{1/}	14	30
Virginia	9	14
Washington ^{1/}	31	33
West Virginia ^{1/}	5	9
Wisconsin	45	72
Wyoming	9	13
Guam ^{1/}	---	3
Puerto Rico ^{1/}	---	1
Virgin Islands ^{1/}	1	6

^{1/} Medical assistance program for the aged in effect as of December 1962. ^{2/} Less than \$0.50.

Old-Age Assistance
Average Payment Per Recipient For Vendor Payments For Medical Care
December 1962



Other guides and recommended standards have been prepared by the Bureau in such areas as drugs, dental services, optical services, physicians' services, pharmaceutical services, and home health services. Other materials are in process on hospital services, nursing home services, advisory committees, rehabilitation, and data collection and evaluation. A preliminary study was also made of health insurance policies and experiences in providing health services for public assistance recipients; no State agency has yet used an insurance plan to implement their MAA program.

An explanatory pamphlet, "Medical Aid for Older Persons Through Public Assistance," was prepared for general public information. "Characteristics of State Public Assistance Plans Under the Social Security Act: Provisions for Medical and Remedial Care," was issued by the Bureau early in 1962, and information on this and other State developments is maintained currently to answer the numerous requests received by the Bureau for information about medical care under public assistance. Help was also given to various interested groups, such as the American Medical Association, American Hospital Association, American Pharmaceutical Association, and American Nursing Home Association, in developing interpretive materials about the Kerr-Mills legislation for their own use.

MEETING MEDICAL CARE NEEDS UNDER PUBLIC ASSISTANCE

Persons aged 65 or over make up 9.4 percent of the total population of the United States; their number is growing at the rate of over 1,000 a

day. Their need for more health facilities and medical services is also increasing.

Since advancing age is accompanied by a decline in both physical and earning capacity, health problems and ability to pay for needed medical care are of major concern to the aged. Moreover, fewer older persons than younger ones are covered by health insurance, and those older persons who do have insurance often have less comprehensive coverage.

Under the Kerr-Mills legislation, between September 1960 and December 1962, 28 jurisdictions extended their medical care provisions under old-age assistance, and 11 included vendor payments for medical services for the first time; and the average monthly vendor payment per recipient under old-age assistance was increased from \$11 in September 1960 to \$15 in December 1962. More of the medically needy aged are also being reached under newly established MAA programs--110,000 received MAA in 28 jurisdictions in December 1962; the average monthly payment was \$205 in December 1962.

Payments to suppliers of medical care nearly doubled between October 1960 and December 1962. Of the total expenditure of \$713 million in fiscal year 1962 for medical vendor payments under all the federally aided public assistance programs, \$350 million was expended under old-age assistance, and \$195 million under medical assistance for the aged (Table).

Yet the need is so great that even with this expansion, the extent to which States are reaching into the total group of medically indigent is still limited. For example, more than two-fifths of the total aged population reside in the 26 jurisdictions which do not yet have MAA programs in operation; the basis on which eligibility for MAA is determined by the different States is only slightly higher than for OAA; eight jurisdictions include more of the major kinds of medical services in MAA than in OAA; and only three provide care without significant limitations in each of the five major areas of medical services.

Medical Care Services Under Old-Age Assistance
December 1962

Service 1/	Availability, by number of jurisdictions			Limitations
	Total	Vendor payment	Money payment	
Physicians services	44	38	6	Number of visits usually restricted.
Dental care	39	30	9	Frequently limited to relief of pain or necessary extractions; some States which permit dentures limit circumstances under which they are authorized.
Hospitalization	51	49	2	Usually limited as to nature of illness or duration of care.
Nursing home care	50	35	15	Maximum \$100 or less per month in individual money payment in three States; in others, rates for specific kinds of care limited.
Prescribed drugs	42	34	8	Limited to specified illnesses in some States; monthly amount per recipient limited in others.

1/ Many jurisdictions through the vendor payment also provided other medical services, such as special nursing care in the patient's own home, transportation to receive medical care, or rehabilitation services (out-patient laboratory and diagnostic services, physical or speech therapy, and prosthetic appliances or special equipment).

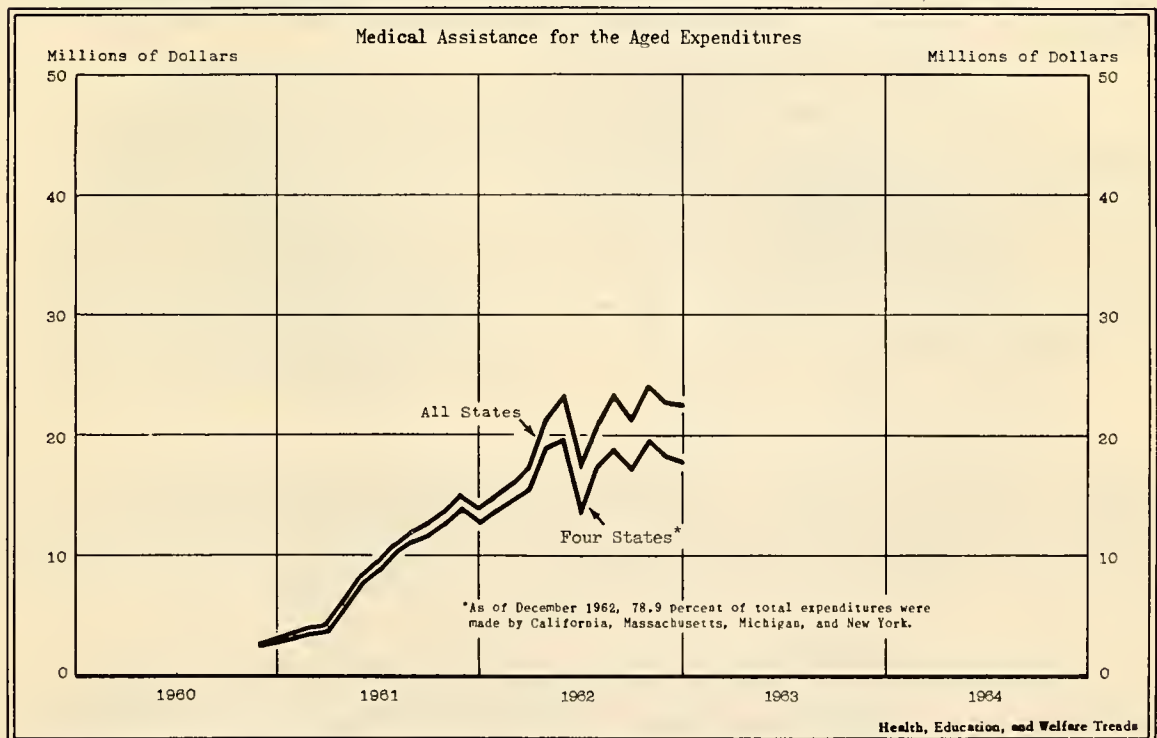
Also, the benefits of the MAA program are reaching a relatively small segment of the elderly of the Nation concentrated in several States--almost two-thirds of the MAA recipients resided in three States and 79 percent of MAA expenditures were made by four States in December 1962 (Chart). Variations between States is wide--recipients ranged from 59 in one State to 29,000 in another, and average payments ranged from a low of \$19 in one State to a high of \$457 in another.

Vendor Payments for Medical Care
Under Public Assistance Programs

Federally aided program	Payments (dollars)	
	Total fiscal 1962 (millions)	Average per recipient June 1962
All programs	713	--
Old-age assistance	350	14
Medical assistance for the aged	195	171
Aid to families with dependent children	91	2
Aid to the permanently and totally disabled	68	16
Aid to the blind	9	8

With more experience, some States will probably extend their MAA programs, and others may establish new programs. Financial limitations in some States may make it necessary for them to adopt stringent eligibility requirements which limit the number of persons eligible for medical care services. In this and other ways, the cost factor could continue to

be a deterrent to the full utilization of the potentials of the Kerr-Mills legislation, if efforts to meet the medical care needs of the aged are continued primarily under public assistance programs.



JUVENILE DELINQUENCY

Donald M. Pilcher, Leonard W. Stern, and I. Richard Perlman

Juvenile delinquency means many different things to different people. To some, the manner of attire--bluejeans or a ducktail haircut--is sufficient to label a child "delinquent." To a home owner, a delinquent may be a youth who rides his bicycle across the lawn. To one who reads lurid headlines in the newspaper about teen-agers, a "delinquent" conjures up a picture of a young hoodlum who may steal, rob or murder.

Legally speaking, a "juvenile delinquent" is a child or young person who commits a delinquent act, as defined by law, and who is adjudicated as such by an appropriate court. But even laws which appear absolute or definitive are not so in the vague terminology employed in the legal definition of delinquency.

Most State laws define as delinquent a juvenile who violates any State or local law or commits any act that would be considered a crime if committed by an adult. In addition most statutes include certain acts which are violations of laws only when committed by children--truancy, running away, incorrigibility, and ungovernable behavior--categories in which the law ceases to be definitive and becomes vague and subjective. This vagueness raises the question of whether, in a given instance, a child is merely rebellious or is incorrigible. When is he socializing with the neighborhood children and when is he loitering? Furthermore, the statutory definitions of delinquency vary among the 50 states--a child may be considered a delinquent in one state and not in another, or even in one county and not in another.

Juvenile delinquency is variously defined even in professional circles. One group holds that a delinquent is a child who has violated the law and has been adjudged delinquent by a court. Others contend that referral to a juvenile court is often influenced by chance factors--that the circumstances under which delinquency is adjudicated vary with the laws, the administrative procedures, the philosophy of the police and the courts, and even with differences in community attitudes toward delinquent behavior. In fact, many children committing delinquent acts

Messrs. Pilcher, Stern, and Perlman are in the Children's Bureau, Welfare Administration, U. S. Department of Health, Education, and Welfare. Major sources used in the preparation of this article were: (1) Children's Bureau, *It's your Children's Bureau* (1962); *Juvenile Court Statistics, 1961*; "Sociological Theories and Their Implications for Juvenile Delinquency," No. 2, *Facts and Facets*; and with the Department's National Institute of Mental Health, *Report to Congress on Juvenile Delinquency* (1960); (2) Departments of Justice, Labor, and Health, Education, and Welfare, *The Federal Delinquency Program Objectives and Operation Under the President's Committee on Juvenile Delinquency and Youth Crime*. . . (November 1962); (3) Federal Bureau of Investigation, *Uniform Crime Reports, 1961*; (4) I. Richard Perlman, "Delinquency Prevention: The Size of the Problem," *The Annals of the American Academy of Political and Social Science*, March 1959, and "Reporting Juvenile Delinquency," *The National Probation and Parole Association Journal*, July 1957; (5) James S. Wallerstein and Clement J. Wyle, "Our Law-Abiding Law-Breakers," *Probation*, March-April 1947; (6) Austin L. Porterfield, *Youth in Trouble* (Fort Worth; Leo Potishman Foundation, 1946); (7) Fred J. Murphy, Mary M. Shirley, and Helen L. Witmer, "The Incidence of Hidden Delinquency," *American Journal of Orthopsychiatry*, Vol. 16, No. 4, 1946; and (8) Robert A. Dentler and Lawrence J. Monroe, "Early Adolescent Theft," *American Sociological Review*, October 1961.

are handled by the police without referral to court. For these reasons some consider police statistics to be better than court statistics as a measure of juvenile delinquency.

Another group holds that a delinquent is any child committing a delinquent act, whether or not he comes to the attention of legal authorities and could be dealt with under the law. The measurement of delinquency by this simplest and most complete definition would require knowledge, not only of the number of delinquent children handled by social agencies, child guidance clinics, schools, law enforcement and judicial agencies, and others, but also of the number who **do not** come to the attention of any agency--those who are not apprehended.

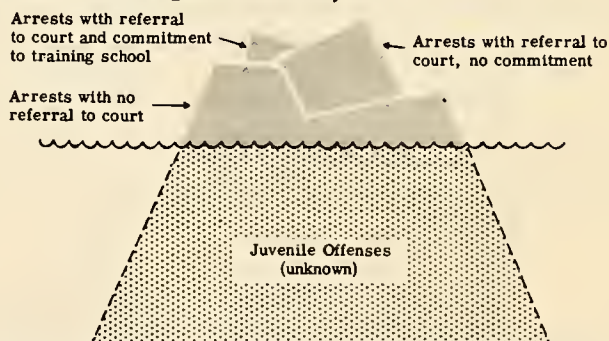
With such differing definitions, and with much delinquent behavior going undetected or, when detected, being handled by other **than** law enforcement or judicial agencies, a clear-cut determination of the exact extent and nature of juvenile delinquency is virtually impossible, particularly for any geographic comparisons.

The Magnitude of Juvenile Delinquency

The total magnitude of juvenile misbehavior may be likened to an iceberg viewed through a light curtain of fog that renders its dimensions uncertain but reveals its general outline above water level. The invisible portion of the iceberg below water level represents the delinquency problem which goes undetected or for which no apprehension or juvenile court hearing results.

Estimated Juvenile Arrests, Court Referrals, and Institutional Commitments for Delinquent Acts, 1961

Juveniles under 18 years of age (000's) ^{1/}		
Arrests	Referrals to juvenile courts	Commitments to training schools for delinquent acts ^{2/}
1,006 ^{3/}	434 ^{4/}	60 ^{5/}



Based on Federal Bureau of Investigation, Uniform Crime Reports, 1961; Children's Bureau, Juvenile Court Statistics, 1961; and unpublished sources. ^{1/} Excludes traffic offenses. ^{2/} Public and private training schools for delinquent youngsters. ^{3/} Fifteen percent of all arrests totaling 6.7 million or 3,652 per 100,000 population. ^{4/} Estimated from sample by Children's Bureau. ^{5/} Estimated from reports on resident population projected one year.

Several studies suggest that the number of undetected delinquents is substantial. One study, published in 1947 by Wallerstein and Wyle, summarized the admissions of some 1700 law-abiding men and women, regarding

their "delinquent" and "criminal" acts. Almost all these individuals confessed to having committed offenses under existing laws. Two-thirds of them engaged in behavior which were felonies under their State laws. Porterfield found that college students acknowledged committing a considerable number of offenses similar to those found among youth brought into court. However, the offenses of these college students rarely appeared in any official statistics.

Another early survey by Murphy, Shirley, and Witmer revealed that a large number of boys admitted to committing serious acts of delinquency that had never become a matter of court record. In one self-report study of 7th and 8th grade youngsters in a midwestern State, 13 to 16 percent of the youngsters admitted serious misconduct. The proportions of such youngsters were almost identical for a suburban area, an urban fringe area of predominantly blue collar workers, and a small rural, relatively isolated town (16, 13, and 15 percent respectively).

Not only do such studies show that the number of hidden delinquents is great, but they also suggest that the number of undetected delinquents is large among the middle and higher income groups--the groups which appear in strikingly small numbers in official statistics. Nonetheless, for purposes of determining characteristics of delinquents on a national basis at any given time and trends of delinquency over time, analysis must be limited to the visible portion of the iceberg--reported data from two primary sources: (1) the Federal Bureau of Investigation reports on arrests and (2) Children's Bureau reports on cases before the juvenile courts and institutional admissions.

The uniform crime-reporting system of the Federal Bureau of Investigation, established in 1930, has steadily increased in coverage. By 1961 some 3,837 police agencies serving 115 million persons (64 percent of the U. S. population), were reporting arrests. Certain regions of the country and cities of certain sizes are overrepresented; others are underrepresented. Arrest information, primarily a measure of law enforcement activity, provides useful data on characteristics of persons arrested for criminal acts. Estimated on the basis of arrest rates reported by the F. B. I., slightly more than a million youngsters were arrested in 1961.

The national source of juvenile court statistics is the Children's Bureau. Since 1926, when a plan was first worked out for the uniform reporting of a few essential statistics by juvenile courts, reporting procedures and content have been modified several times. The Bureau originally tabulated individual data cards sent in directly by the courts but now receives summary reports from the State agencies that collect and tabulate the data from the courts.

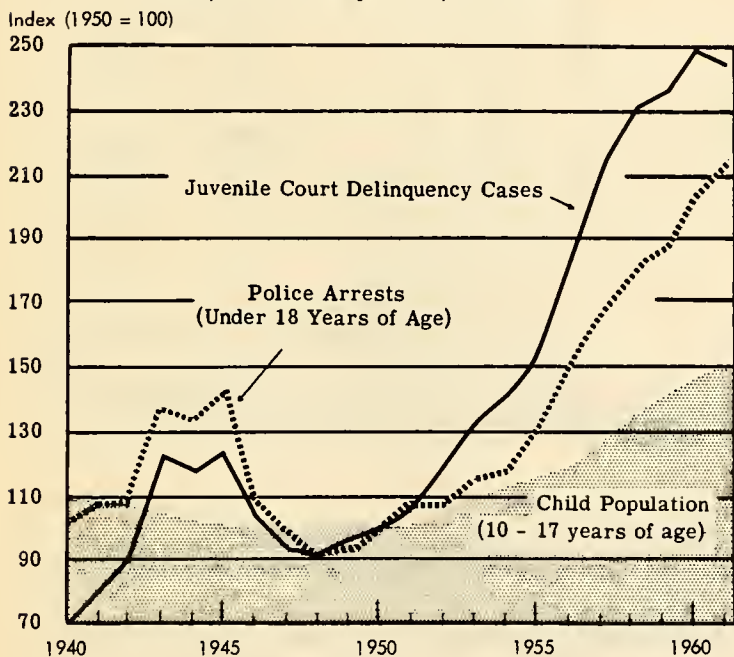
Since uniform reporting definitions and concepts have been developed over a long period of time with the cooperation of the courts, there is stability in these statistics. Until 1956, however, there was no assurance of the representativeness of the voluntary data collected.

But in 1956 the Children's Bureau began collecting data from a national sample of 502 juvenile courts to provide a basis for national estimates that have a known degree of reliability. The Bureau will soon begin to collect national information not only on the number of juvenile court cases but also on certain characteristics of children referred to court, on source of referral and reason for referral, and on court disposition of cases.

Although juvenile court statistics are imperfect measures of delinquency, they do include children whose delinquencies were considered important enough to refer to a court. They approximate more closely than do other series of data the definition of those who consider a child delinquent only when the courts have so adjudicated. These statistics exclude children whose misbehavior is handled by the police without referral to court--nationally, these exclusions account for half of the police arrests and are primarily for minor offenses which many do not consider delinquency.

The juvenile courts in 1961 processed 434,000 youngsters--both those arrested and those referred from other agencies--on alleged delinquencies for other than traffic cases. About half of these youngsters appeared in court upon petition (official cases) alleging delinquency. More than 60,000 youngsters were committed to public and private training or correctional schools and camps for delinquent youngsters during 1961.

Police Arrests of Juveniles, Juvenile Court Delinquency Cases, and Child Population, 1940-1961



Police arrest and juvenile court data, while differing in definitions, extent of coverage, geographic representation, and other factors, nevertheless show a remarkable similarity in their trends. Following a sharp increase during World War II, both arrests and court cases dropped abruptly until 1948. From then until 1960 there was a steady increase.

Police arrests continued to climb in 1961, but delinquency cases heard by juvenile

courts decreased for the first time since 1948. The slight decrease of 1 percent occurred in spite of the 3 percent increase in the child population, aged 10 through 17. This was a reversal of the trend of the past decade in

which delinquency cases not only increased each year but increased more rapidly than the child population.

The 2 percent increase in 1961 in juvenile delinquency cases handled by urban courts (comprising more than two-thirds of all court delinquency cases) was offset by a 4 percent drop in courts serving semi-urban areas and an 18 percent drop in those serving rural areas. The largest decrease in 1961 occurred in the unofficial delinquency cases handled by rural courts.

Data on juvenile arrests and juvenile court cases shed light not only on the volume and trend of delinquency but also on the types of offenses committed and on the characteristics of the juvenile offenders by sex, age, and residence.

Juvenile Arrests

Of all offenses charged in the juvenile arrest data reported by the F. B. I. for 1961, the most frequent single offense was larceny, followed^{1/} by burglary. Property offenses constituted 41 percent of all arrests; offenses against persons^{2/}, only 4 percent. Disorderly conduct accounted for 9 percent and liquor law violations and drunkenness, for 6 percent of the arrests of persons under 18 years of age. Sex offenses accounted for less than 2 percent of the arrests and narcotic drug violations for less than 1/2 of 1 percent.

The F. B. I. uniform reporting system, designed primarily for adult offenses, may not include or specifically identify such youth offenses as running away, truancy, violation of curfew, and ungovernable behavior. Thirty-one percent of juvenile

Juvenile court delinquency cases				
Year	Number (000's) ^{1/}		Per 1,000 population 10-17 years of age (incl. traffic)	Child population 10-17 years of age ^{2/} (millions)
	Incl. traffic	Excl. traffic		
1940	200		10.5	19.1
1941	224		11.8	18.9
1942	250		13.4	18.6
1943	344		18.8	18.3
1944	330		18.6	17.7
1945	344		19.6	17.5
1946	295		16.9	17.4
1947	262		15.1	17.3
1948	254		14.7	17.3
1949	272		15.7	17.4
1950	280		16.1	17.4
1951	298		16.8	17.7
1952	332		18.2	18.2
1953	374		19.7	19.0
1954	395		20.2	19.6
1955	431		21.4	20.1
1956	520		25.2	20.6
1957	603	440	27.2	22.2
1958	703 ^{3/}	473	30.0	23.4
1959	773 ^{3/}	483	31.4	24.6
1960	813	510	32.0	25.4
1961	801	503	30.6	26.1

^{1/} Through 1954 estimated by the Children's Bureau on the basis of reports from a comparable group of courts; beginning with 1955 estimated from national sample of juvenile courts. Inclusion of data for Alaska and Hawaii beginning with 1960 does not materially affect the trend. ^{2/} Based on estimates from the Bureau of the Census, U.S. Department of Commerce, Current Population Reports, Series P-25. ^{3/} Much of the increase is accounted for by an administrative change in the method of handling juvenile traffic cases in one State.

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- 1/ Robbery, burglary, larceny, auto theft, embezzlement and fraud, stolen property (buying, receiving, possessing), and forgery and counterfeit-ing.
- 2/ Murder (negligent and non-negligent manslaughter), forcible rape, aggravated assault, and other assaults (non-aggravated).

arrests but only 10 percent of adult arrests were unspecified. Most of these offenses would be characterized as juvenile misbehavior rather than crime. Nearly half of the arrests of girls are categorized as "other" compared to less than one-third of the arrests of boys. Younger children are also more likely to be classified in this category.

Slightly more than one-fourth of the girls, but more than two-fifths of the boys were arrested for property offenses. For both boys and girls the most frequent single offense was larceny, but boys were

Arrests of Juvenile Offenders, 1961 ^{1/}												
Type of Offense	Number			Percent ^{2/}								
	Total	Urban	Rural	All	Under 15	15	16	17	Male	Female	Urban	Rural
Total	639,734	566,682	73,052	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Criminal homicide ^{3/}	620	499	111	.1	*	.1	.1	.2	.1	*	.1	.2
Forcible rape	1,594	1,363	231	.2	.1	.3	.3	.5	.3	--	.2	.3
Aggravated assault	8,039	7,189	850	1.3	1.0	1.4	1.5	1.6	1.3	1.0	1.3	1.2
Other assault	16,337	15,089	1,248	2.6	2.4	2.5	2.7	3.2	2.6	2.6	2.8	1.8
Robbery	8,363	7,775	588	1.3	1.2	1.3	1.4	1.7	1.5	.4	1.4	.8
Burglary	74,814	61,508	13,306	12.1	14.4	12.0	10.5	9.5	13.8	2.4	11.3	19.0
Larceny-theft	126,382	113,619	12,763	20.5	26.4	18.8	16.5	14.6	20.6	20.0	20.8	18.2
Auto theft	41,164	35,714	5,450	6.6	4.6	10.3	8.6	6.0	7.5	1.7	6.5	7.8
Embezzlement & fraud	973	834	139	.1	.1	.1	.2	.3	.1	.2	.2	.2
Stolen property offenses	3,441	2,940	501	.5	.5	.5	.6	.6	.6	.3	.5	.7
Forgery & counterfeiting	1,832	1,422	410	.3	.1	.3	.4	.5	.2	.4	.3	.6
Prostitution ^{4/}	573	544	29	.1	*	.1	.1	.2	*	.4	.1	*
Other sex offenses	11,192	10,012	1,180	1.8	1.7	2.0	1.9	1.8	1.5	3.4	1.8	1.7
Narcotic drug laws	1,882	1,701	181	.3	.2	.3	.3	.5	.3	.3	.3	.3
Weapons (carrying, possessing)	7,558	6,860	698	1.2	.9	1.3	1.5	1.6	1.4	.2	1.3	1.0
Offenses against family and children	1,359	1,070	289	.2	.3	.2	.2	.3	.1	.5	.2	.4
Liquor laws	22,925	18,700	4,225	3.7	.7	2.7	5.5	8.7	3.8	3.2	3.4	6.0
Driving while intoxicated	1,521	1,207	314	.2	*	.1	.3	.8	.2	*	.2	.4
Disorderly conduct	59,157	55,627	3,530	9.6	8.1	8.7	10.3	12.4	9.6	9.5	10.2	5.0
Drunkenness	16,631	14,207	2,424	2.7	.7	1.9	3.6	6.4	2.8	1.8	2.6	3.5
Vagrancy	10,677	10,143	534	1.7	.8	1.2	1.8	3.9	1.8	1.3	1.9	.8
Gambling	1,419	1,352	67	.2	.1	.2	.3	.4	.2	*	.2	.1
All other offenses	197,335	176,203	21,132	32.0	35.7	33.9	31.3	24.3	29.0	49.3	32.3	30.1
Suspicion ^{2/}	23,946	21,104	2,842									

Federal Bureau of Investigation, Uniform Crime Reports, 1961 and unpublished sources. ^{1/} These reported data cover an aggregate population of 115.4 million, or 64 percent of the total U.S. population—85.2 million in 2,776 cities of over 2,500 population and 30.2 million in county agencies. ^{2/} In computing percentages, arrests for suspicion were omitted. ^{3/} Includes both (a) manslaughter by negligence and (b) murder and non-negligent manslaughter. ^{4/} Includes commercialized vice.

arrested far more often than girls for burglary and auto theft. Arrests for murder and manslaughter by negligence were rare for both sexes, but less frequent for girls. Sex offenses other than forcible rape accounted for nearly 4 percent of the girls arrested compared to 1.5 percent of the boys arrested. Liquor law violations, drunkenness, driving while intoxicated, disorderly conduct, vagrancy and gambling accounted for 15 percent of the girls arrested and 18 percent of the boys.

By age groups, offenses against persons (murder, manslaughter by negligence, forcible rape, and assaults), while comprising a small proportion of total offenses, increased in frequency with age, in both urban and rural areas. Certain property offenses (robbery, fraud, and forgery or counterfeiting) increased slightly but progressively with age whereas arrests for burglary sharply decreased with age and more strikingly for boys than for girls. Larceny arrests also decreased progressively with age, particularly in the cities. Arrests for auto theft peaked at 15 years of age.

Burglary and property offenses in general, as well as liquor law violations, drunkenness, and driving while intoxicated, represented greater proportions of arrests in rural areas than in the cities. However, city youngsters were more likely to be arrested for disorderly conduct and for offenses against persons than their rural peers.

Juvenile Court Cases

Juvenile court delinquency cases in 1961 continued to be primarily a problem for boys--they were referred to court more than four times as often as girls.

Cases handled unofficially--without filing a petition--comprised about half of the court delinquency cases in 1961. The proportion was higher in urban and semi-urban courts than in rural courts, perhaps due partly to the availability of specialized intake or probation staffs in the larger courts.

The rate of delinquency cases (the number of cases per 1,000 child population aged 10 through 17) was about three times higher in pre-dominantly urban areas than in predominantly rural areas. Courts in predominantly urban areas handled more than two-thirds of all the delinquency cases in the country.

Boys were referred to courts for considerably different reasons than girls. Based on reports from courts serving very large cities, more than half of the offenses committed by girls were for violations of laws applicable to juveniles only--runaway, truancy, violation of curfew, ungovernable behavior, etc. About one-fifth of the boys were involved in offenses of this nature. On the other hand, almost half of the offenses for which boys were referred were for offenses against property--larceny, auto theft (including unauthorized use of auto), vandalism, robbery and burglary; less than a fifth of the girls were involved in such cases. This was also

Type of Court	Number (000's)			Percent		
	Both Sexes	Boys	Girls	Both Sexes	Boys	Girls
All	503	408	95	100	100	100
Urban	350	281	69	69	69	73
Semi-urban	119	98	21	24	24	22
Rural	34	29	5	7	7	5

Children's Bureau, Juvenile Court Statistics, 1961. 1/ Excludes traffic offenses.

characteristic of arrest data. Boys were referred to court for the following offenses in their order of frequency: larceny, burglary, and auto theft. Girls were most frequently referred for running away, ungovernable behavior, larceny, and sex offenses.

About one-third of the delinquency cases referred to courts serving large cities were dismissed with warning or adjustment. This high proportion of dismissals does not mean that the children were not involved in delinquent acts--in one-tenth of the cases either the children were not so involved or the complaints were not substantiated. Rather the child's family or personal situation appeared to warrant dismissal. There appears to be no significant difference in the disposition of boys' and girls' cases. However, the types of dispositions vary

Disposition of Delinquency Cases by Juvenile Courts, 1961 ^{1/}			
Type of Disposition	Percent		
	Total	With petition	Without petition
All	100	100	100
Dismissed:			
Not involved or complaint not substantiated	10	10	9
Warned or adjusted	34	14	53
Probation	23	47	-
Informal supervision	7	-	15
Commitment	10	20	-
Other	16	9	23

Children's Bureau, Juvenile Court Statistics, 1961. ^{1/} Monthly reports for October-December 1961 from 20 of the 30 courts serving the largest cities in the United States. Traffic offenses are excluded except for driving while intoxicated, hit and run, and driving without a license.

Reason for Referral to Court in Delinquency Cases, 1961 ^{1/}			
Offense	Percent		
	Both sexes	Boys	Girls
All	100.0	100.0	100.0
<u>Applicable to both juveniles and adults</u> ^{2/}			
Forcible rape	0.1	0.1	--
Aggravated assault	1.7	1.9	0.9
Other assault	2.3	2.4	1.7
Robbery	1.9	2.3	0.4
Burglary	11.4	13.9	1.4
Larceny - theft (except auto)			
Under \$50	15.5	16.2	12.8
\$50 or more	1.6	1.7	0.9
Vandalism	3.9	4.6	1.1
Auto theft (unauthorized use)	8.0	9.5	2.0
Auto theft (other)	0.4	0.5	0.2
Sex offenses (excl. forcible rape)	4.1	2.7	9.7
Violation of narcotic drug laws	0.2	0.2	0.2
Violation of other drug laws	0.2	0.1	0.2
Weapons (carrying, possessing)	0.8	1.0	0.2
Disorderly conduct	6.6	7.1	4.3
Drunkenness	2.4	2.5	2.2
Driving while intoxicated	0.2	0.2	0.1
Hit and run	0.2	0.2	0.1
Driving without a license	5.4	5.8	3.5
Other	5.4	5.9	3.7
<u>Applicable to juveniles only</u>			
Ungovernable behavior	7.7	5.5	17.0
Truancy	5.8	5.0	8.9
Running away	8.8	5.3	23.3
Curfew violation	2.6	2.6	2.2
Other	2.8	2.8	3.0

Monthly reports to Children's Bureau for October-December 1961 from 20 of the 30 courts serving the largest cities in the United States. ^{1/} Traffic offenses are excluded except for driving while intoxicated, hit and run, and driving without a license. ^{2/} Offenses of manslaughter by negligence and murder and non-negligent manslaughter comprised less than 0.05 percent of total offenses and are not listed here.

significantly when the cases are handled "with petition" or "without petition". This is to be expected, since certain actions taken by the court that curtail or deny the freedom of the child or the rights of the parents to the child's care, custody and control usually are handled in an official manner with full

hearing. In almost half of the delinquency cases handled "with petition", the child is placed on probation; in about one-fifth of the cases, the child is committed to care and custody of an agency or institution. More than half of the cases handled "without petition" are adjusted, indicating either that the offense is relatively minor or that the child has had no serious delinquency record.

Traffic Cases

In addition to the 503,000 delinquency cases (including some multiple referrals), the juvenile courts in 1961 disposed of 298,000 traffic cases involving 257,000 children, or almost 1 percent of the child population. These traffic cases did not represent all traffic cases of juveniles, since many juvenile courts lack jurisdiction in such cases.

Causes of Delinquency

Causal theories in delinquency are many and varied, and depend crucially upon the definition of delinquency used. Some theories attempt to account for all "acting out behavior", some for social maladjustment; others are concerned chiefly with "official" delinquents. Much of the research has been limited to specific groups of delinquents such as "lower-class delinquents", or gang members, or children who have psychological problems.

Single-factor theories of delinquency have been largely disproved and discredited. Moreover, many factors frequently cited as causes of delinquency are only its concomitants--not causes in the sense that their removal would necessarily lead to a decline in delinquency. Among these factors are broken homes, poverty, poor housing, lack of recreational facilities, poor physical health, and employment of mothers.

Some psychiatrists assert that delinquency is a mental illness, frequently stemming from disordered parent-child relations. Others maintain that it is often an exaggeration of normal adolescent development. Still others consider it only a symptom indicating anything from normal behavior in a slum area (or a healthy reaction to bad conditions) to a mental disorder, including psychosis.

Sociologists, too, offer several theories:

- Since many youths belonging to low income families lack the means for achieving the aspirations for social and economic success that Americans maintain is every child's right, a "delinquent subculture" develops. Boys, feeling deprived and lacking in self-esteem create a new set of values at variance with the values held by the rest of the community. Once such a group of disaffected boys is formed, others join their ranks for fun, fellowship, and protection--or because they are forced to do so.

- Cultural conflict between immigrants and their children, the presence of adult criminal groups, and other slum conditions make it difficult for parents to exert effective control over their children. Under these conditions delinquency can become a group tradition, transmitted from older to younger boys.
- The element of age is important in gang delinquency. Lacking access to adult rights and privileges, the adolescent gang arises in an attempt to bridge the social gap between childhood and adulthood through creating and maintaining its own set of status criteria.
- Delinquency is a reaction of youth to sick society. This viewpoint mentions behavioral parallels in the adult world and the absence of good adult models for emulation.
- Delinquent gangs and "street-corner groups" are simply an adolescent version of "lower-class" culture, which, it is said, attaches particular value to "toughness", "sharpness", and other "lower-class" traits. The adolescent gang views these traits as necessary for survival and success in adult life.

Each of the theories explains some cases; each "cause" may interrelate with others in ways not yet known. Certainly, an overall control and treatment program should take all of them into account and provision should be made for more research along all these lines. None of these theories, however, explains why there was such a steady and marked increase in juvenile arrests and juvenile court cases during the past decade. For such an explanation, theory must be looked at in the light of the current scene. Among present social factors pertinent to the increase of delinquency may be:

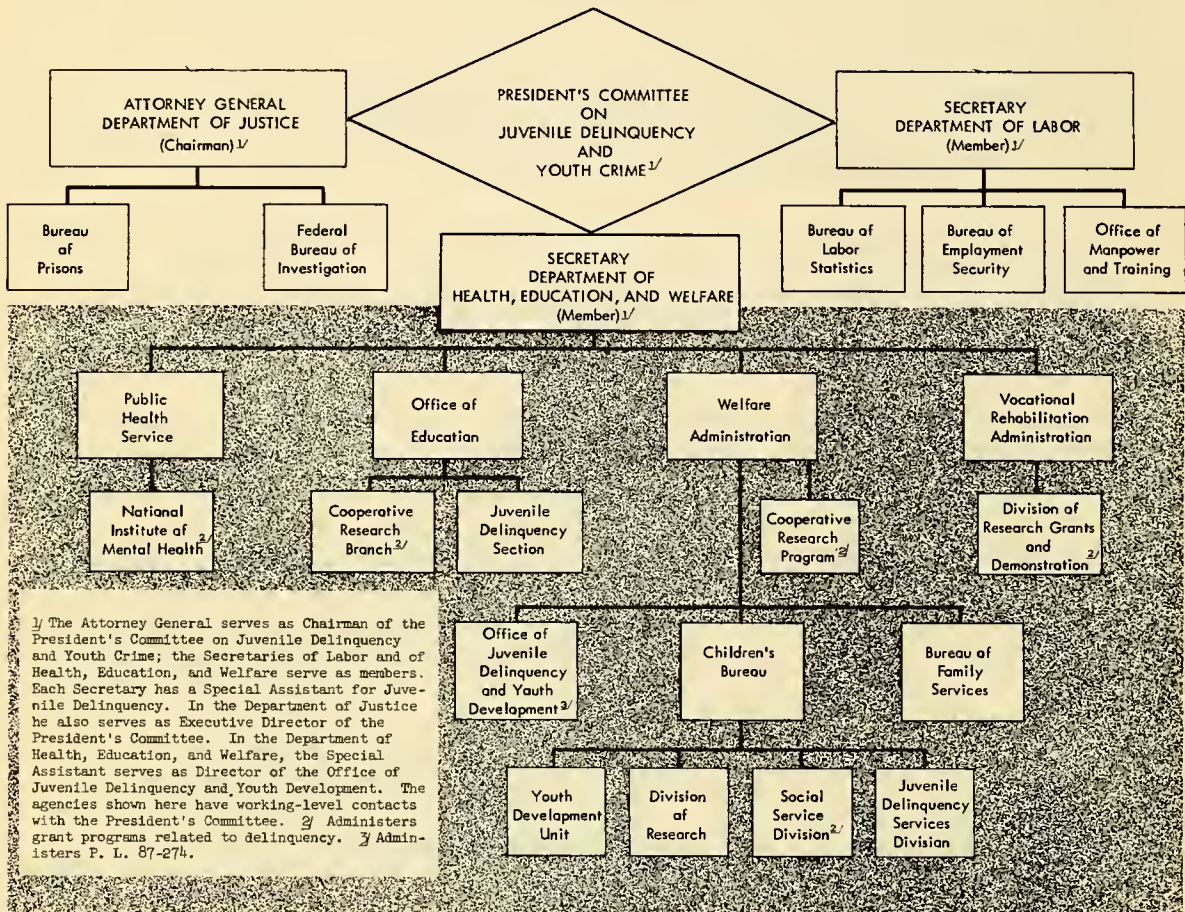
- (1) increasing movement of population, including migration into cities of large number of low-paid, poorly educated, rural people;
- (2) the breakdown of traditional controls and ways of life in family and neighborhood;
- (3) discrimination against minority groups;
- (4) postwar prosperity coupled with "status-seeking"--success being increasingly measured in material terms;
- (5) mass media emphasis on toughness, glitter, and false values with murder, violence, and deceit treated as front-page news; and
- (6) threats of war and annihilation.

Delinquency and the Department of Health, Education, and Welfare

Several departments of the Federal government have been vitally concerned with juvenile delinquency for many years. The Departments of

Justice, Labor, and Health, Education, and Welfare, through various offices and bureaus, have developed consultative, research, and research grant programs.

Organization of the Federal Government to Combat Juvenile Delinquency
(as of June, 1963)



From its earliest years, the Children's Bureau (now in the Welfare Administration of the Department of Health, Education, and Welfare) has met requests of State agencies for advice on legislation, for help in improving the treatment of delinquent children in training schools and other institutions, and for suggestions on the organization of State or local programs that would coordinate and improve existing services and activities.

A Special Juvenile Delinquency Project, financed by foundation and other voluntary funds, was initiated in 1952 to work with the Children's Bureau in combating juvenile delinquency. It focused on problems related to the prevention and treatment of juvenile delinquency and to the stimulation of appropriate action. In 1954 services in the field of juvenile delinquency were expanded and a Division of Juvenile Delinquency Service was set up.

Since 1957, as juvenile delinquency continued to mount, the Bureau has accelerated its consultative services on technical problems of juvenile delinquency control and treatment. At the direction of Congress, the Children's Bureau and the National Institute of Mental Health submitted a joint report in 1960 on juvenile delinquency trends, related factors, means of treatment, control and prevention, and research evaluation and training needs. Out of the Bureau's investigations emerged 18 widely used technical publications in a series entitled Juvenile Delinquency: Facts and Facets.

A new Youth Development Unit is concerned with promoting opportunities for youth, and consultative services have been stepped up. As indicated previously, the Bureau receives regular reports from juvenile courts and training schools for delinquent youth and compiles national program statistics for public use. The Bureau has also been developing forms for use by the courts in compiling data.

In recent years, two other units of the Department of Health, Education, and Welfare have organized research and grant programs in the field of delinquency. The National Institute of Mental Health has engaged in and supported a steadily increasing stream of activities that have implications for the understanding and control of juvenile delinquency. The Institute program in delinquency includes demonstration projects, training projects, broad support of basic and applied research including psychological and sociological studies, and the development of evaluative research instruments. Many of the research grants center around the need for an adequate definition and delineation of problem areas in delinquency, effective prevention and treatment methods, and the need for training both professional and non-professional workers in this area.

The Office of Education through its cooperative research program has also encouraged a number of projects dealing with such subjects as the causes of vandalism in schools and conformity and deviation among adolescents.

The President's Committee on Juvenile Delinquency and Youth Crime

The urgent need for further expansion and intensification of a Federal program to aid in the prevention and control of juvenile delinquency was publicly recognized in May 1961, when President John F. Kennedy established the President's Committee on Juvenile Delinquency

and Youth Crime with the Attorney General as Chairman and the Secretary of Labor and the Secretary of Health, Education, and Welfare as members.

This action acknowledged that the vast and complex job of combating juvenile delinquency could not be carried out effectively by a single individual or agency, but required the coordinated efforts of many groups on a scale proportionate to the problem. According to the Executive Order establishing the President's Committee, the Committee is to (1) stimulate experimentation, innovation, and improvement in Federal programs, (2) encourage the sharing of information between Federal agencies, and State, local and private organizations interested in youth problems, and (3) recommend ways in which the prevention, treatment and control of juvenile delinquency and youth crime can be made more effective.

Shortly after the establishment of the President's Committee, Congress enacted the Juvenile Delinquency and Youth Offenses Control Act (Public Law 87-274 of 1961). Responsibility for the administration of this act, vested in the Secretary of Health, Education, and Welfare, has been delegated to the Office of Juvenile Delinquency and Youth Development. Administration of the Act is strengthened by close communication between this Office and the Office of the Special Assistant to the Attorney General, who is the Executive Director of the President's Committee, and the Special Assistant to the Secretary of Labor.

Under this Act, grants have been made (1) to one large community for a comprehensive demonstration project and (2) to fifteen other communities for planning comprehensive approaches to delinquency prevention and control. These grants were awarded to communities, judged to have the capacity for developing innovative programs, and apparently able to meet the basic criteria of: (a) comprehensiveness in scope of planning; (b) wide involvement of important local groups such as public and private agencies, universities, power forces and neighborhood leadership; (c) financial commitment; (d) transferability to other areas; and (e) built-in evaluation. These communities have gathered staffs competent in research and program planning to develop integrated programs of social action and social services, which flow logically from a sound body of research data and a viable theoretical formulation. From these planning efforts, further large scale demonstration projects are expected.

The rapid increase in the size of the delinquency problem and the number of proposed prevention and control programs makes the shortage of trained workers in the delinquency field progressively more acute. The Delinquency Act therefore provides funds for the training of professionals and volunteers who work with problem youth. Three types of training programs are being supported: university training centers, curriculum development projects, and short-term institutes. The university centers, the core of the training program, will be permanent bases offering many types of training courses to a wide variety of personnel. Curriculum development is an important aspect of the training effort, for new ideas

cannot be taught with old texts. The results of action programs, pilot projects, and research must continually be shaped into new teaching materials. Short-term workshops and institutes have been supported to keep front line workers abreast of new developments in their own and related fields.

The operation of the new Federal delinquency program has placed increased demands on the personnel of the three Federal departments to provide technical assistance to the States, cities, and rural areas interested in developing programs for the prevention and control of delinquency and for expanding youth opportunities. To provide such assistance, funds have been made available to expand existing staff; new units in the Children's Bureau and in the Office of Education have been established. The activities of these and several other agencies--the Vocational Rehabilitation Administration, the Bureau of Family Services, and the National Institutes of Health--are coordinated within the Department of Health, Education, and Welfare.

More broadly, the Federal government can play an extremely valuable and necessary part in combating juvenile delinquency by providing leadership, consultation, and stimulation to those with direct responsibility for dealing with juvenile delinquency and by encouraging research and development of better methods for its prevention and treatment. Delinquency is a most complicated and intricate problem requiring the cooperative efforts of all levels of government and of voluntary and private agencies and organizations as well.

FROM WORK RELIEF TO REHABILITATION THROUGH WORK AND TRAINING

Helen E. Martz and Earl E. Huyck

Work relief--a form of governmental assistance in which needy unemployed persons earn all or part of their assistance payment through employment--was widely used during the nineteen thirties to maintain work habits and morale. In the nineteen sixties, the objective has shifted to rehabilitation through work and training.

The Public Welfare Amendments of 1962, in response to public interest in Federal support of work relief, provide Federal aid to the States in community work and training programs to encourage the conservation of work skills and the development of new skills for potentially employable recipients of the federally aided program of aid to families with dependent children.

Work Relief Prior to 1961

Work relief, initiated under England's 16th century poor laws authorizing the setting to work of able-bodied "paupers" in work-houses, labor yards, public roads, streets and other projects as a test of willingness to work, was evident in the operation of poor laws throughout the past 300 years. In the United States prior to 1930, emergency work was resorted to in some communities under private or State and local governmental auspices during periods of acute unemployment. The work-test for able-bodied needy persons was not uncommon.

Work programs received their first Federal financial support in 1932 under the Emergency Relief and Reconstruction Act in a period when more than 12 million persons (24 percent of the civilian labor force) were unemployed. In successive measures during the thirties, Federal funds were used in work programs under the Federal Emergency Relief Administration (FERA), the Civil Works Administration (CWA), the Work Projects Administration (WPA), the Public Works Administration (PWA), the Civilian Conservation Corps (CCC), and the National Youth Administration (NYA).

Mrs. Martz is a Social Welfare Adviser in the Bureau of Family Services, Welfare Administration (formerly called the Bureau of Public Assistance, Social Security Administration), and Dr. Huyck is a Program Analysis Officer in the Office of the Assistant Secretary (for Legislation); U.S. Department of Health, Education, and Welfare. For further information see: (1) the Bureau's Work Relief...A Current Look (1962), Characteristics of General Assistance in the United States (1959), and "Aid to Dependent Children of Unemployed Parents...", in the Social Security Bulletin, August 1962; (2) Donald S. Howard, The WPA and Federal Relief Policy, Russell Sage Foundation, 1943; and (3) Security, Work, and Relief Policies, Report of the Committee on Long-Range Work and Relief Policies, to the National Resources Planning Board, 1942.

Health, Education, and Welfare Indicators, February 1963

The WPA was the most significant of the various work activities in both the scope and variety of the work accomplished. By June 1940, it had provided more than 13 million man-months of employment to about 7.8 million different individuals. However, even this program was "rationed" on the basis of urgency of need in order to keep its costs to a minimum. As a result, work was provided for only about half the estimated number of the able-bodied needy unemployed. On the premise that employable people should work for their subsistence when they could, State and local work relief programs continued to grow. In May 1940, even with improved economic conditions, it was estimated that such work relief projects in 25 States employed up to 180,000 workers.

When the WPA program was discontinued in 1943, the Federal Government assumed no further financial responsibility for meeting need due to unemployment. States and localities tried to meet such need under State and/or locally financed general assistance programs, many of which continued to operate work relief projects.

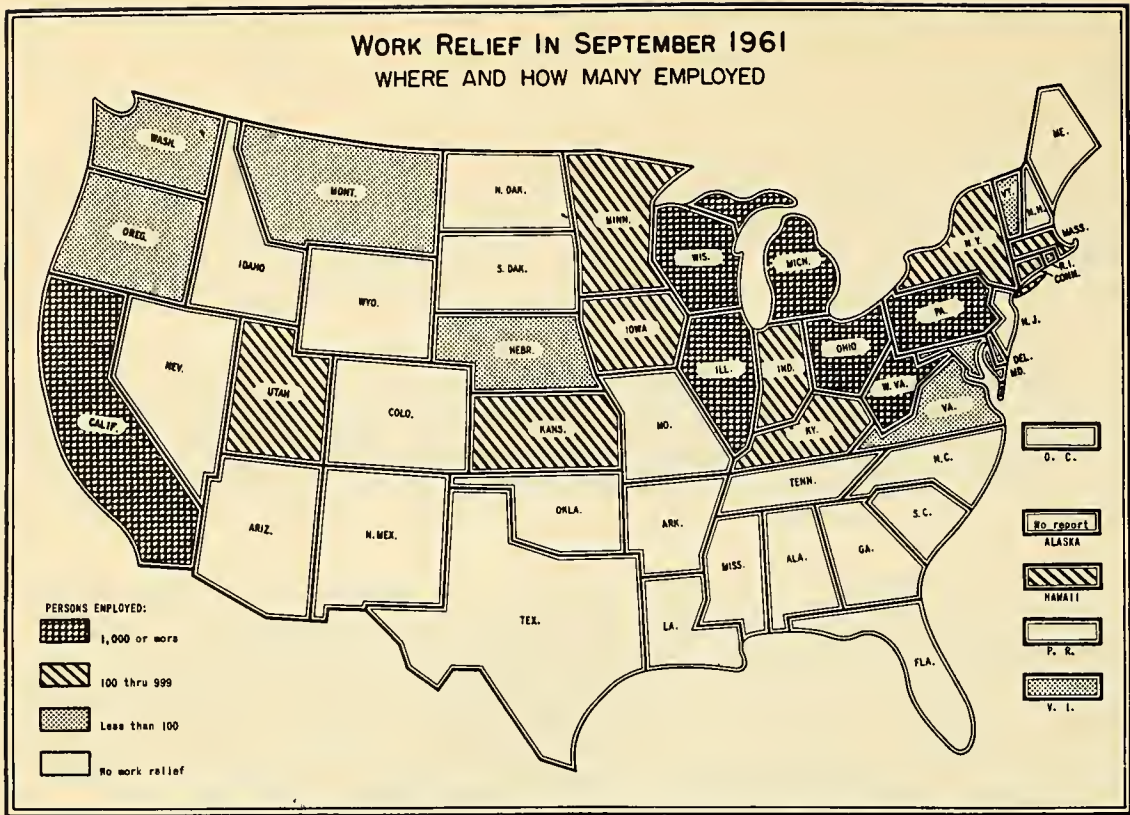
Little attention was given on a nationwide basis to the question of work relief during World War II when there were heavy demands for labor (only 670,000 persons or 1.2 percent of the civilian labor force were unemployed in 1944) and during most of the postwar period when employment levels were generally high. Nonetheless unemployment increased in 1949, 1953-54, 1957-58, and 1960-61. During the recovery period following each economic recession, the rate of unemployment tended to be higher than its pre-recession level. The specter of rising unemployment remained a threat and ultimately stimulated the consideration of countermeasures.

As of September 1961 there were 71.1 million persons in the U.S. civilian labor force, and 67.0 million of these were employed. The other 4.1 million persons--6.8 percent (seasonally adjusted) of the labor force--were unemployed. This rate was below the postwar peak unemployment rate (seasonally adjusted) of 7.6 percent in August 1958, when 4.7 million persons were out of work. The seasonally adjusted unemployment rate fell steadily from September 1961 to 5.5 percent in March 1962 and remained at about that level through November 1962.

Work Relief in September 1961

A relatively small number of unemployed persons were engaged in work relief projects in September 1961, according to a nationwide inquiry made by the Bureau of Family Services. Work relief projects then employed some 30,400 persons in 438 local jurisdictions in 27 States (Map and Table). Of those assigned to work relief projects, 86 percent were concentrated in seven States, primarily in the northern industrial area bordering the Great Lakes (Michigan, Illinois, Ohio, Wisconsin, and Pennsylvania) together with West Virginia and California. Work relief recipients represented only a small proportion of the general assistance caseload in these States.

WORK RELIEF IN SEPTEMBER 1961 WHERE AND HOW MANY EMPLOYED



Projects ranged from brush-cutting along remote country roads to training-oriented projects in big-city hospitals. The most prevalent projects, in the order named, were maintenance of streets and roads, custodial work in public buildings, care of park and recreation facilities, and distribution of surplus food commodities. Urban areas offered a greater variety of work than rural areas.

Most of the projects served a useful purpose for the community. One project, for example, trained work relief recipients for jobs as nursing-home attendants and kitchen helpers. In another instance, however, an inadequately financed country airport used work relief recipients to perform essential custodial services, a type of work usually performed by regular employees.

Most of those assigned to work relief projects were unemployed family men; women were employed to a limited extent in about a fifth of the communities. The determination as to whether a recipient was able to work was usually made by the welfare worker at the time the recipient applied for assistance. A recipient claiming disability was usually referred to a physician for examination; in only a few instance were all recipients required to have a physical examination.

Most of the agencies assigned workers to projects; a few delegated work assignments to the sponsor of the project, and in some places, assignment was made by elected officials. One large county agency established a "welfare rehabilitation service" to which all employable recipients were referred for

WORK RELIEF IN SEPTEMBER 1961

State	Persons employed	Wages paid or relief "worked out" (dollars)	
		Total (000's)	Average per person
United States ^{1/}	30,427	\$2,772 ^{2/}	\$92 ^{2/}
California.....	2,512	173	69
Connecticut....	233	1 ^{1/}	1 ^{1/}
Delaware.....	71	5	69
Hawaii.....	160	11	67
Illinois.....	6,373	413	65
Indiana.....	673	29	43
Iowa.....	101	4	39
Kansas.....	336	26	78
Kentucky.....	304	26	85
Maryland.....	87	6	73
Massachusetts..	275	29	105
Michigan.....	6,756	923	137
Minnesota.....	353	22	61
New York.....	919	61	67
Ohio.....	6,078	601	99
Oregon.....	80	5	59
Pennsylvania...	1,223	67	55
Rhode Island...	74	6	86
Utah.....	547	31	57
West Virginia..	1,229	149	121
Wisconsin.....	1,949	182	93

1/ Includes all States having work relief programs. The following States making total payments of less than \$2,000 to fewer than 50 individuals are not shown separately: Montana, Nebraska, Vermont, Virginia, and Washington; and the Virgin Islands.

2/ Amounts not reported for seven jurisdictions in Connecticut and one in Virginia. Individuals employed in these jurisdictions excluded in computing averages.

of assistance earned on work relief was usually the same as that for comparable work in the community. Most work relief recipients worked about two weeks out of the month. In some localities, recipients worked insufficient hours to earn all their assistance because there were not enough work relief jobs to go around. The average monthly amount credited toward the assistance payment to those on work relief was about \$92, and most recipients--92 percent--received their remuneration in the form of an assistance payment; the remaining 8 percent received wages, usually limited by the family's needs as budgeted by the welfare agency. Some agencies allowed for the expense of transportation to work and for the extra food and clothing needed.

Work relief recipients usually received their assistance in money, although in a few agencies all general assistance, including work relief, was

a classification interview. Assignment was then made to a work relief project or to a sheltered work shop, or help was given in obtaining regular employment. In another metropolitan area, assignment was based primarily on available openings for unskilled jobs without relating the suitability of these assignments to the skills of individual workers. Local agencies assigned recipients to projects close to their homes when possible; some agencies or sponsors provided transportation when necessary.

Most recipients reported to their projects as scheduled. For example, in one county only 5 out of 125 work relief recipients were absent from the job at any one time. In general, most agencies warned the offender of unexcused absences, required him to make up the lost time, and stopped assistance if he willfully refused to work when able to do so. Infrequently, assistance had to be discontinued because of refusal to work. Work relief recipients were generally required to register with the public employment service and given other opportunities to search for regular employment.

The hourly rate of pay used in computing the amount

paid in vouchers for food, shelter, clothing, and utilities. The value of the assistance worked for, and wages paid, on all work relief projects was about 12 percent of the total spent for general assistance and comparable programs in the 27 States with work relief programs.

The cost of providing work relief beyond assistance was estimated by the Bureau of Family Services, in the absence of other available data, at \$15 a month per employed recipient to cover expense of transportation, extra food, and clothing; and about \$4 a month per recipient for coordinating the program and assigning recipients to projects. Other costs--materials, tools, and supervision--were usually borne by project sponsors.

Work relief was financed entirely by local funds in 13 of the 27 States; in the other 14, by State participation in the overall general assistance program--in six, the participation ranged from 50 to 100 percent; in the other eight, it was less than 50 percent.

Work relief was governed by State laws in 26 States, being mandatory in five States and optional in 21. Five of the States with laws governing work relief had no programs; six of the States with work relief programs were administering them without any specific State statute. Only half of the 27 States with work relief projects provided State supervision; about a third set wage rates and established standards for working conditions, and only a fourth required projects to be submitted for approval and evaluated them periodically.

Federal Role in Work Relief in the Nineteen Sixties

In May 1961, Title IV of the Social Security Act was temporarily amended to include children of unemployed parents in the aid to dependent children program. With Federal funds available for assistance to employable parents of such children, States transferred some needy families from their general assistance programs to the amended ADC program.

Of the 13 States that provided aid to families with unemployed parents (ADC-UP) during September 1961, 12 included work relief projects in their general assistance programs. In seven of these 12 States, employable ADC fathers were assigned to work relief projects to earn the State and/or locally financed portion of their assistance payment which was above the maximum amount for which Federal financial participation was available.

The number of families involved was relatively small because some parents had limited employability due to health problems; others were not available because they were taking part in vocational training programs or were about to secure full-time jobs, or the nonmatchable portion of the assistance payment was too low to justify assignment to a work relief project.

Even though relatively few ADC parents were assigned to work relief projects, several States asked that Federal participation be extended to assistance in the form of wages earned under work relief by unemployed parents with dependent children. Some administrators of State and local public welfare programs, taxpayers' organizations, and several nationally known magazines called attention to the need for work relief as an adjunct to public assistance.

The Federal government gave careful consideration to the potentials of work relief as a way of helping needy people achieve greater capacity for self-care and/or self-support within their families and communities.

Recognition was also given to the differences in the need for and objectives of work relief in the sixties compared with that of the thirties. With widespread unemployment arising from breakdown in economic functioning, the problem in the thirties was one of providing work programs for individuals who would probably secure private employment when there was any appreciable economic upswing. The problem in the sixties is different. Unemployment--while smaller in size and severity--represents a continuing problem. With increasing automation, industrial production can continue at the present level with appreciably fewer employees than are now gainfully employed. The U.S. Department of Labor estimates that about 1.8 million jobs are affected each year by automation and other technical change, and about $1\frac{1}{4}$ million young people a year are entering the labor force. Thus, even though the economy moves to higher levels of activity, serious problems of unemployment will remain for some time to come.

Five especially vulnerable groups have been identified: (1) young people with less than high school education; (2) unskilled workers, whose place among the employed has diminished from 1 in 5 to 1 in 20; (3) Negroes, whose unemployment rate is about double that of white workers; (4) older workers (45 years of age and over); and (5) workers from depressed areas. The labor force segment composed of these groups will find chances for employment more difficult with each new breakthrough in efficiency.

The character of unemployment today involves many long-term problems that almost inevitably result in dependency. Idleness also brings frustration and despair to those who want to work but are unemployed, and deterioration to older workers whose skills are no longer needed.

From a review of 1,800 case records of unemployed-parent families in 45 localities in the 13 States making payments under the amended aid to dependent children program (ADC-UP) during the period May-September 1961, these unemployed parents could be broadly classified into three major groups:

- (1) unskilled laborers with physical, mental, or emotional handicaps in addition to little education and poor work experience, whose re-employment opportunities seemed limited;
- (2) fathers unemployed less than 3 months, mainly under 45 years of age, with stable work records (many were steel, construction, or seasonal workers) who were already moving toward re-employment on their own initiative; and
- (3) a larger number of unemployed fathers whose chances of returning to work could probably be improved with training, retraining, or other special services--this group included: (a) school "drop outs" and young persons recently discharged from military service with no previous work experience or skills; (b) young workers with several children, limited education, and no skills who had moved from one short-term job to another with no vocational goal; and (c) older men, generally with large families, education below the eighth grade level, and with little if any skill transferable to other jobs.

In an effort to curb unemployment and increase economic growth, the 87th Congress passed several measures. Legislation in 1961 provided: (1) additional temporary unemployment insurance benefits for those who had exhausted their rights to such benefits and (2) financial and technical assistance, occupational training or retraining in areas designated as redevelopment areas. Provision was made in 1962 for: (1) appraisal of manpower requirements, vocational training for unemployed youth and adults and low-pay workers, and other skill development training programs; (2) acceleration of public works programs at the Federal, State, and local levels; and (3) Federal financial participation in community work and training programs for adult potentially employable persons receiving assistance under the aid to families with dependent children program.

Community Work and Training Program--1962

In providing for community work and training programs through the Public Welfare Amendments of 1962, a new concept of rehabilitation shifted the objective from "work for relief" to work and training programs that encourage education, employment, reemployment, retraining, and conservation of skills.

The new legislation also includes safeguards, many of which were suggested from earlier experience with work relief. For example:

- Provision must be made for adequate protection of the health and safety of workers, and appropriate arrangements must be made for the care and protection of children during the absence of parents doing such work;
- Payment for such work must be at rates not less than those for similar work in the community, and in determining need, consideration must be given to reasonable expenses attributed to such work;
- Work performed must serve a useful public purpose and not interfere with or displace regular employees; and
- Opportunity must be given the worker to seek regular employment and to secure available training. Cooperative arrangements must also be established and maintained with State employment and vocational and adult education agencies for maximum utilization of their resources to improve opportunities of such recipients for regular employment.

Effective retroactively to July 1, 1961 under certain conditions, the program was authorized to June 30, 1967. To implement these provisions, the Bureau of Family Services has provided guidelines to the States, suggesting for example:

- The specialized knowledge possessed by community groups should be used in developing projects and establishing operating procedures. These groups might include business and labor organizations, voluntary agencies, and such public agencies as employment service, adult education, and vocational education.
- At least in larger programs, the administrative staff should include a person experienced in classification and assignment procedures. Supervision on the projects should be performed by qualified foremen. This may require the hiring of nonrelief personnel, as such skills are not likely to be present among relief recipients.

- There should be sufficient variety of projects for the number and abilities of recipients, and projects should provide the kind of work experience that will preserve or develop vocational skills. For some recipients, sheltered employment may be required.
- Recipients should not be assigned to tasks that are beyond their capacity to perform; for instance, persons with physical limitations should not do heavy work. Parents--usually mothers--should not be assigned to work relief if they are needed in the home to care for children.

Summary

While following the American tradition that able-bodied people should work for their subsistence, the primary objective of federally-aided work relief has shifted from maintaining morale in the thirties, to rehabilitation through work and training, in the sixties.

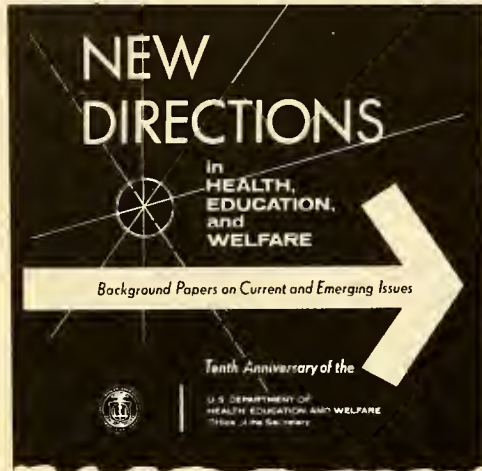
It is recognized that the vast majority of those receiving federally aided assistance--the aged, the blind, the disabled, and the young children and mothers who must remain at home because no other child-care plan is suitable or available--will not be able to work. But for those unemployed parents receiving aid to families with dependent children and who have a work potential, the new federally aided community work and training program will enable some to better compete for jobs in today's complex industrial economy, which increasingly demands more qualified and skilled workers.



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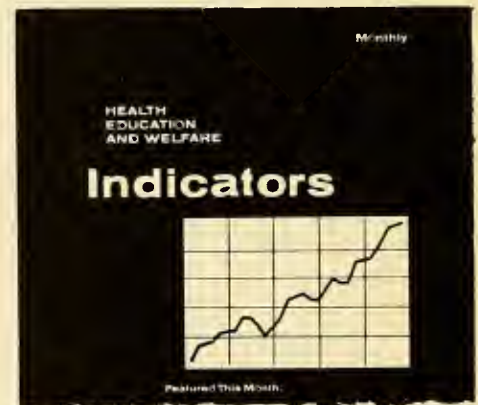
Contains selected papers that have appeared as feature articles in the monthly *Indicators*. Analyzes program developments and needs in the fields of health, education, and welfare.

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Presents information about the program objectives of each major unit of the Department and the extent of the problem toward which the program is directed, the scope of the program, its legal basis, and related information.

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Provides facts on the background, purposes, financial aspects, who may receive Federal aid, application procedures, program developments during the past year, and legal basis of the various financial assistance programs.

Contains detailed information on the formulas used in distributing funds, State matching requirements, and figures on funds allocated under each program. Averages 250 pages.



Indicators and 1962 editions of *Trends*, the *Handbook on Programs* and *Grants-in-Aid* are available at prices shown. The 1963 editions of these publications are in process.

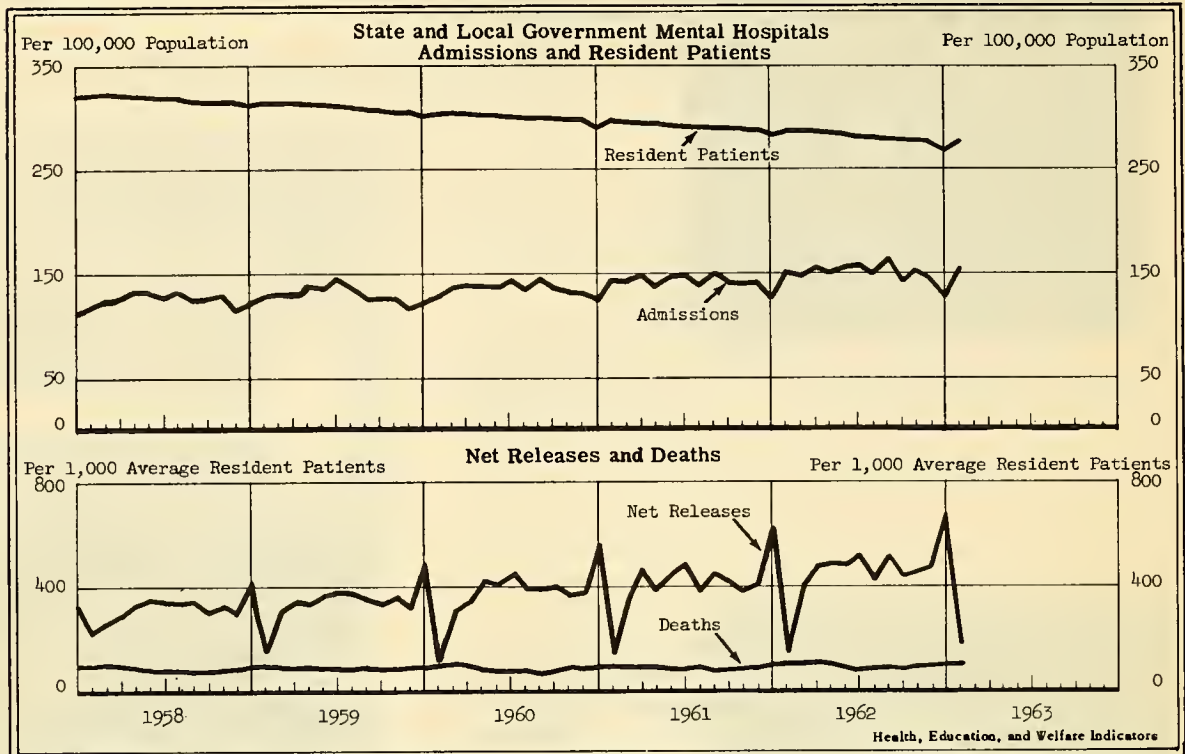
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HEALTH, EDUCATION, AND WELFARE INDICATORS (Sample Page)

PATIENTS IN STATE AND LOCAL GOVERNMENT MENTAL HOSPITALS

The number of resident patients in State and local government mental hospitals at the end of January (511,000) was 1.9 percent below the number in these hospitals a year earlier. Patient movement, however, was higher--the January 1963 admissions increased by 5.6 percent, net releases rose by 7.4 percent, and deaths decreased 2.2 percent over the corresponding period a year ago.



Period ^{1/}	Number in thousands				Rate per 100,000 civilian population ^{4/}		Rate per 1,000 average resident patients ^{5/}	
	Resident patients ^{2/}	Admissions	Net live releases ^{3/}	Deaths	Resident patients	Admissions	Net live releases	Deaths
1950.....	510.7	152.3	99.8	41.3	340.0	101.4	197.8	81.8
1951.....	518.2	152.1	102.2	42.1	343.0	100.7	198.1	81.9
1952.....	529.7	162.9	107.9	44.2	345.4	106.2	205.5	84.4
1953.....	542.8	170.6	114.2	44.9	347.8	109.3	212.5	83.7
1954.....	551.7	171.6	118.9	42.5	346.8	107.9	217.8	77.7
1955.....	558.9	178.0	126.5	44.4	344.4	109.7	227.9	79.9
1956.....	551.4	185.6	145.3	48.2	333.5	112.3	261.8	86.9
1957.....	548.6	194.5	150.4	46.8	325.8	115.5	273.8	85.1
1958.....	545.2	209.8	161.9	51.4	318.0	122.4	296.2	94.0
1959.....	541.9	222.8	176.4	49.6	310.1	127.5	325.4	91.5
1960.....	535.8	234.8	191.4	49.8	300.7	131.8	355.0	92.3
1961.....	527.5	253.0	215.6	46.9	291.1	139.6	405.1	88.1
1962.....	515.9	270.8	230.9	49.6	280.8	147.4	443.4	95.2
1962								
January.....	521.1	23.1	6.8	4.6	285.5	149.1	154.9	105.8
February.....	521.6	20.8	15.7	4.5	285.5	148.3	392.8	113.4
March.....	519.6	24.0	21.0	5.0	284.0	154.4	475.1	114.1
April.....	516.8	22.6	21.2	4.3	282.1	150.2	498.4	101.6
May.....	516.0	24.3	21.3	3.8	281.4	155.9	484.5	87.4
June.....	514.1	23.8	22.4	3.4	280.0	157.9	529.1	80.6
July.....	514.9	23.5	18.9	3.7	280.1	150.4	433.6	84.3
August.....	514.1	25.3	22.5	3.6	279.1	161.6	513.9	83.1
September.....	513.3	21.3	18.6	3.5	278.2	140.6	439.3	82.6
October.....	512.9	23.7	19.8	3.8	277.6	151.1	454.9	87.2
November.....	511.7	21.9	19.8	3.8	276.6	144.0	470.1	89.9
December.....	498.6	20.0	29.1	4.3	269.2	127.2	677.6	99.3
1963								
January.....	511.0	24.4	7.3	4.5	275.5	154.6	171.1	104.8

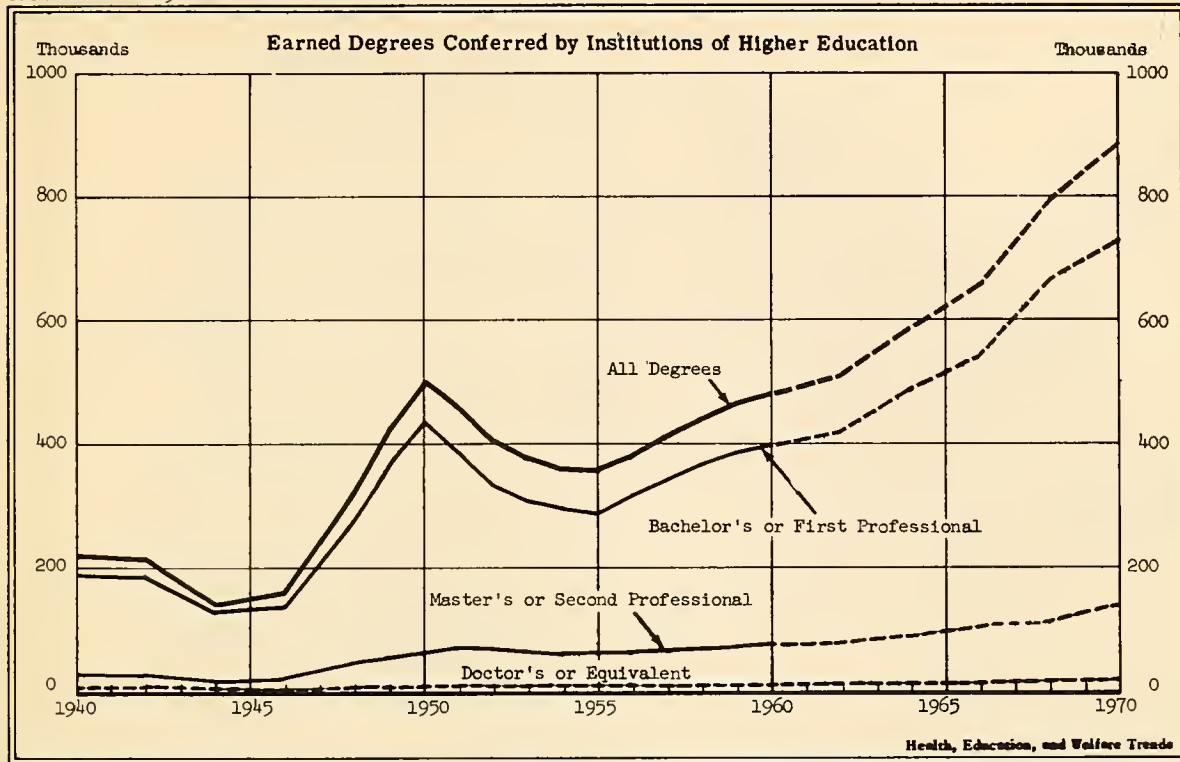
Source: U.S. Department of Health, Education, and Welfare; Public Health Service, National Institute of Mental Health; *Patients in Mental Institutions for 1950-1960* data, *Mental Health Statistics: Current Reports*, Series MHB-H, and unpublished monthly data. The Model Reporting Area (PHS Pub. 699, 1959) includes definitions and tabulations required of member States. ^{1/} Dates are for end of period; annual data are for fiscal years, which end on June 30 for most public hospitals. Monthly estimates for continental United States were made on the basis of data submitted by 25 States through June, 1960 and by approximately 30 States thereafter. Patients in the public mental hospitals of these States account for about five-sixths of the resident patient population in all public mental hospitals in the U. S.; annual rates for these States very closely parallel those for the U. S. ^{2/} The resident patient population at end of period equals resident patients at beginning of period plus admissions minus net releases and deaths. ^{3/} Direct discharges plus placements on extramural care minus returns from extramural care. Patients out for the Christmas-New Year holiday period (more than 7 days) are considered as releases in December and returns in January. ^{4/} Monthly rates are based on monthly estimates of the civilian population for the States reporting but are shown on an annual basis with adjustment for number of days in the month.

HEALTH, EDUCATION, AND WELFARE TRENDS

(Sample Page)

EARNED DEGREES CONFERRED BY INSTITUTIONS OF HIGHER EDUCATION: BY LEVEL AND SEX, 1900-1970

Degrees conferred by institutions of higher education fell during World War II and then rose to a postwar peak of nearly 500,000 in 1950. In 1956 the number again began to increase, reaching 479,000 in 1960. Master's degrees accounted for 15.5 percent of all degrees and Doctor's degrees, for 2.0 percent of all degrees in 1960. The number of earned degrees for each sex and for each level of degree is expected to increase by more than four-fifths in the 1960's.



(In thousands)

Year ending June 30 ^{1/2}	All degrees		Bachelor's or first professional ^{2/}		Master's or second professional		Doctor's or equivalent ^{3/}	
	Both sexes	Males	Both sexes	Males	Both sexes	Males	Both sexes	Males
1900.....	29.4	23.8	27.4	22.2	1.6	1.3	.4	.4
1910.....	39.8	30.7	37.2	28.8	2.1	1.6	.4	.4
1920.....	53.5	35.5	48.6	32.0	4.3	3.0	.6	.5
1930.....	139.8	84.5	122.5	73.6	15.0	8.9	2.3	1.9
1936.....	164.2	99.9	143.1	86.1	18.3	11.5	2.8	2.4
1940.....	216.5	123.9	186.5	109.5	26.7	16.5	3.3	2.9
1942.....	213.5	121.1	185.3	103.9	24.6	14.2	3.5	3.0
1944.....	141.6	63.5	125.9	55.9	13.4	5.7	2.3	1.9
1946.....	157.3	69.7	136.2	58.7	19.2	9.5	2.0	1.6
1948.....	317.6	203.0	271.2	175.6	42.4	28.9	4.0	3.5
1950.....	498.3	376.8	433.7	329.8	58.2	41.2	6.4	5.8
1951.....	456.8	332.2	384.4	279.3	65.1	46.2	7.3	6.7
1952.....	403.2	277.6	331.9	227.0	63.6	43.6	7.7	7.0
1953.....	374.2	249.3	304.9	200.8	61.0	41.0	8.3	7.5
1954.....	358.7	233.8	292.9	187.5	56.8	38.1	9.0	8.2
1955.....	354.4	230.3	287.4	183.6	58.2	38.7	8.8	8.0
1956.....	379.5	247.0	311.3	199.6	59.3	39.4	8.9	8.0
1957.....	411.1	271.8	340.3	222.7	62.0	41.3	8.8	7.8
1958.....	440.2	295.2	365.7	242.9	65.6	44.3	8.9	8.0
1959.....	464.1	310.6	385.2	254.9	69.6	47.4	9.4	8.4
1960.....	479.2	315.2	394.9	255.5	74.5	50.9	9.8	8.8
PROJECTIONS ^{4/} (r)								
1962.....	508.2	330.6	418	267	78.8	53.3	11.4	10.3
1964.....	588.4	378.2	485	306	90.7	60.7	12.7	11.5
1966.....	655.3	433.6	537	351	104.3	70.0	14.0	12.6
1968.....	790.2	527.7	664	439	109.7	73.8	16.5	14.9
1970.....	884.1	590.4	727	480	139.0	94.0	18.1	16.4

Source: U. S. Department of Health, Education, and Welfare; Office of Education; Annual Report of the Commissioner of Education for 1900 and 1910 data; Biennial Survey of Education in the United States, Chapter on Statistics of Higher Education for 1920-46 data; Earned Degrees Conferred by Higher Educational Institutions annually beginning with school year 1948-49; Projection of Earned Degrees to 1969-70 (OE-54002), September 1959. U. S. Department of Commerce, Bureau of the Census; Current Population Reports, Series P-25, No. 187, provides the necessary population projections (Series II). 1/ Data are limited to the 48 States and the District of Columbia through 1948 but include Alaska, Hawaii, and Puerto Rico beginning with 1950. 2/ Includes M.D., D.D.S., LL.B., B.D., etc. 3/ Includes Ph.D., Ed.D., etc. 4/ Through the early 1960's based on freshman enrollment or the number of lower degrees in earlier years; for subsequent years based on continuation of time trends of ratios of degree holders to persons in specific age-sex groups.

Features:
Statement of
major trends

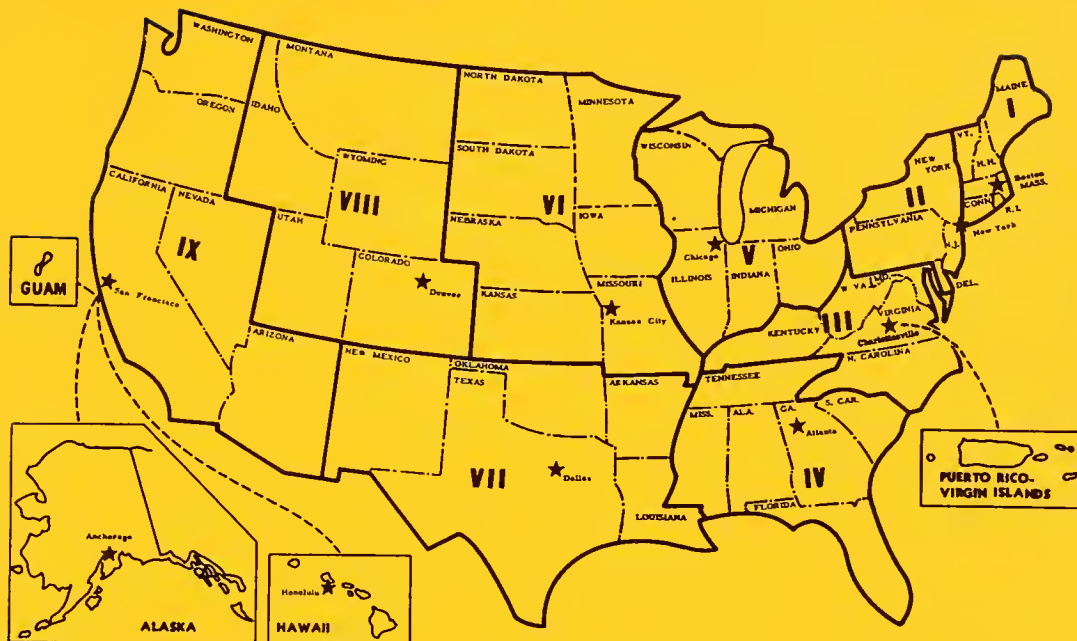
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Regions and Regional Offices
of the
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Most of the arrangements for consultation, grants, and other services to State agencies and other organizations are made through the nine Regional Offices of the Department.

Region I, 120 Boylston Street, Boston 16, Mass. Serves Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.

Region II, Room 1200, 42 Broadway, New York 4, N.Y. Serves Delaware, New Jersey, New York, Pennsylvania.

Region III, 700 East Jefferson Street, Charlottesville, Va. Serves District of Columbia, Kentucky, Maryland, North Carolina, Virginia, West Virginia, Puerto Rico, Virgin Islands.

Region IV, Room 404, 50 Seventh Street, N.E., Atlanta 23, Ga. Serves Alabama, Florida, Georgia, Mississippi, South Carolina, Tennessee.

Region V, Room 712 New Post Office Bldg., 433 West Van Buren St., Chicago 7, Ill. Serves Illinois, Indiana, Michigan, Ohio, Wisconsin.

Region VI, 2302 Federal Office Bldg., 911 Walnut St., Kansas City 6, Mo. Serves Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota.

Region VII, 1114 Commerce St., Dallas 2, Tex. Serves Arkansas, Louisiana, New Mexico, Oklahoma, Texas.

Region VIII, Room 551, 621 Seventeenth Street, Denver 2, Colo. Serves Colorado, Idaho, Montana, Utah, Wyoming.

Region IX, 447 Federal Office Bldg., Civic Center, San Francisco 2, Calif. Serves Alaska, Arizona, California, Hawaii, Nevada, Oregon, Washington, Guam, American Samoa.

EDGE INDEX

This Edge Index is designed to facilitate your use of *New Directions* by pointing to matching marks at the beginning of an article or series of related articles.

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